Introduction

At a time when planning practice is characterized by creative resolutions to problems aggravated by budget cuts, *carolina planning* offers its readers a look at some of the issues planners and policy-makers must deal with. The staff of *carolina planning* is in the process of tabulating the results of our recently conducted reader survey, and we are finding interesting and pleasing results. Respondants are commenting on the value of a regional publication to inform and alert them to new ideas in the field.

We are finding that our readers look to *carolina planning* to inform them of practical planning considerations and new ideas worthy of our attention. *cp* also serves as a communication tool for planners in the southeast.

As we begin our seventh year of publication, *carolina planning* strives to offer its readers a summary of some of the new issues planners must be concerned with. This issue takes a look at one of the most pressing concerns facing us: hazardous waste management. Terrence Pierson reviews North Carolina legislation regarding the transport, storage and disposal of hazardous wastes and suggests how North Carolina might tackle their problem. A look at the problem from two different perspectives is offered in our *forum* section.

Other articles include a piece by M. Shea Hollifield on condominium conversions and what their effect might be on North Carolina cities. Paul Luebke summarizes the East-West Expressway battle in Durham, North Carolina. And Robert Yow describes Fayetteville's solution to adult entertainment businesses.

As always, we welcome any comments by our readers on the design and content of *carolina planning*, and we encourage you to send us manuscripts which would be of interest to other planners for publication in future issues. This issue marks the second time we are printing consulting firms' business cards. Our card number is growing. If you or your firm has a card you would like us to print write to our Circulation Manager c/o *carolina planning*. Once again, thank you for your continued support of our efforts.

Forrest G. Sadler
Kathy Blaha

carolina planning

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carolina planning welcomes submissions from our readers. Article-length manuscripts should be typed with a maximum of twenty double-spaced pages. *carolina forum* pieces, on interesting activities or planning issues, should be a maximum of seven pages. Letters to the Editor will vary accordingly.

Subscriptions to *carolina planning* are available at an annual rate of $7.00 ($8.50 outside North America), or $13.00 for two years ($14.50 outside North America). Please be sure to give us your new address should you move.

Address all manuscripts and letters to the Editor, and all subscriptions and back issue-requests to the Circulation Manager, carolina planning, *New East 033A, UNC-CH, Chapel Hill, North Carolina 27514.*

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carolina forum

Two Views on North Carolina's Waste Management Dilemma
Interviews with Dr. Bernard Greenberg, Chairman of the Governor's Task Force on Hazardous Waste Management, and Bill Cummings, a leader of the Protect Our Piedmont Coalition

The Resource Conservation and Recovery Act of 1976 requires each state to develop a comprehensive waste management system, providing the public adequate protection from the hazards of storing, transporting, and disposing toxic and low-level radioactive wastes. North Carolina's new "cradle-to-grave" waste tracking system is beginning to monitor waste generation and transport. But many hazardous waste materials pose management questions far beyond transport: some may be recycled or detoxified; others need storage for a number of years; still others require permanent storage and are practically a permanent threat. To deal with a host of technical and administrative concerns to be addressed in creating a comprehensive waste management system, Governor Hunt's Task Force on Waste Management began meeting in August 1980. A final report was submitted to the Governor in March, with legislative recommendations for the 1981 General Assembly.

Chairman of the Task Force is its sole representative from higher education, Dr. Bernard G. Greenberg, Dean of the School of Public Health at the University of North Carolina-Chapel Hill. Dr. Greenberg was interviewed January 30, in the period between the Task Force's public presentation of its draft, and its post-draft deliberations for the final report.

carolina planning: In your estimation, just how serious is North Carolina's hazardous waste problem?

Greenberg: Every state has a hazardous waste problem. North Carolina is now the tenth most populous state, yet it generates an amount of low-level radioactive waste which places it fourth in the nation. The primary reason for that is we generate a lot of electricity in this state by nuclear energy, and when Duke Power's Maguire Plant goes into operation, the waste load will be even larger than it is now. Another reason is that the fuel rods used in these nuclear energy plants are manufactured in a plant in Wilmington, by General Electric. They account for something like 88% of the low-level radioactive waste. The other 12% comes from hospitals, medical schools, research institutes. Low-level radioactive materials are used for tracer studies, for diagnostic work, for therapy in the hospital, and so on. All of that stuff -- the gloves, the clothes, the paper, the syringes, the test-tubes -- everything that's used, once it comes in contact with radioactive material, automatically becomes radioactive. So even if we didn't have this large amount of radioactive waste from the nuclear energy industry, the state would still have 25,000 cubic feet per year of low-level radioactive waste generated by scientific and medical research.

e p: Along with nuclear waste, the Task Force is also dealing with non-radioactive hazardous waste. Is there a basic difference in the way the two types of wastes should be handled?

Greenberg: Oh, absolutely -- they're entirely different. Low-level radioactive waste has to be handled in a different way. Some of it can be stored. If the half-life is short enough, the material becomes almost completely inactive within five or six half-life periods. Other stuff, like C_{14}, has a half-life of 5700 years. If you wait six half-life periods, you're talking about 35-36,000 years, which means permanent handling. But some of the radioactive material, like tritium that may be in your watch, is very low-level and has a relatively short life.

As far as non-radioactive toxic and hazardous substances are concerned -- these are chemicals, acids, some solid, some fluid -- which have to be handled quite differently. Some of them are ignitable, like waste motor oil, paints, solvents, and many of the dyes used in the textile industry. A lot of the material is recoverable; it can be recycled. Some are acids which are corrosive; they'll burn through practically anything. Some of them are toxic substances, like PCBs and the pesticides that are used in agriculture. They have to be detoxified, or somehow or other handled in a permanent way; or at least stored until the technology is known to neutralize them or make them innocuous. For example, the PCBs that were illegally dumped on North Carolina roads -- 210 miles of them -- are still out there because the technology isn't known to detoxify them. Only about six months ago, however, a company developed an incineration process for detoxifying PCB. But it has to be done in a lab; we still don't know how to do it on the road. I'm sure the technique will be available someday to detoxify it on the road -- maybe five years, maybe two years, maybe ten years from now. It's all in the process of development, and until that technology is available, we have to have a waste management system whose basic purpose is to prevent the formation of waste, or to minimize the amount to be buried or stored.

Bernard G. Greenberg. Photo by Harriet Barr

e p: Did the Task Force consider suggesting a moratorium on new industries that generate significant quantities of hazardous and radioactive wastes?

Greenberg: No, the problem isn't going to go away if you create a moratorium. Even if you don't have any new industry, you still have enough to worry about the problem right now. You can't stop industry or progress, in the same way for example, that people wanted to stop research on recombinant DNA. Well, it turns out now that the research on recombinant DNA may be the greatest breakthrough in science since the atomic bomb, or atomic fusion or fission. Now they're using genetic engineering to manufacture insulin, to manufacture interferon; they'll probably use it to manufacture various enzymes that may be useful in immunology, and so on. You don't stop science, and you can't stop industry. I think a moratorium is a non-viable solution to the problem.

e p: What about investigating the type of new industry that comes into the state?

Greenberg: There already is a statute in the books that was passed by the General Assembly several years ago. Any new industry that comes in has to be investigated by the Departments of Commerce and Natural Resources

and Community Development (NRCD). Commerce attracts the new industry; DNRCD is supposed to make sure that the impact of that industry upon the environment will not be detrimental to the environment or the health of the general population. So that law is already on the books.

c p: A 1979 survey for the U.S. House Subcommittee on Oversight and Investigation includes a list of 125 North Carolina sites in which industrial wastes have been disposed since 1950. Shouldn't the state's first order of business be attention to these already existing hazardous waste sites?

Greenberg: As far as I know, the Solid and Hazardous Waste Branch in the Department of Human Resources knows about all of these. They're all presumably under surveillance and being monitored by that unit. They're not, I'm told by Mr. Strickland, who's in charge of that unit, hazardous enough that they would even qualify for the federal Superfund that was passed a few months ago.

Our first order of business is to create a system, which we don't have, to coordinate the activities of state government. We now have a number of agencies which have authority: the Commerce Department, Crime Control and Public Safety, Department of Human Resources, and so on. We already have some statutes, but they are not coordinated or stringent enough. So the first order of business is to create a system. What we've recommended is the Governor's Waste Management Board.

c p: That comment brings us to some of the specific Task Force recommendations.

Greenberg: The main theme we are trying to emphasize is prevention. That means the state has to invest some money in research, to invest in technology to assist and advise the waste generators, and to conduct continuing education through workshops, symposia and other forms of education to help waste generators know how to manage waste: how to prevent it if at all possible; if they can't prevent it then to recycle it; if they can't do either one then to dispose of it as safely as possible, either through incineration on land or at sea, or in some way detoxifying it, making it as neutral as possible.

c p: Some people have suggested that products should have labels disclosing hazardous materials involved in their manufacture.

Greenberg: It's a nice suggestion that will not mean a thing. If you take out a pack of cigarettes and examine it, it says: "Warning -- smoking is dangerous to your health." This hasn't prevented many people from smoking. So if you put on a battery or a bar of soap that this is a waste-related product, this isn't going to change a person's lifestyle.

c p: Why did the Task Force recommend a board to coordinate present agencies involved in waste management, rather than a separate agency to oversee all aspects of the problem?

Greenberg: There are at least seven or eight departments in state government now that by statute have some authority for waste management. If you're going to create one superboard, you practically have to reorganize state government, rewrite all these state laws. This might take two years to study. Moreover, you might end up with the kind of situation that we now have with the Department of Energy. All or most of what the Department has done is regulation; it really hasn't done much toward contributing to the solution of the energy problem. In order to avoid a whole reorganization of state government, we're trying to create a board with a little bit of power and authority that will be able to pull together the present power that state agencies have.

c p: The Task Force has recommended that the private sector take the lead responsibility in selecting and operating hazardous waste facilities.

Greenberg: In terms of either a burial facility or an incineration facility, I think the state is least qualified to act as operator. Then you'd have state agencies supervising other state agencies. It's much better if you can get the private sector to enter the field. There are dozens of companies in this business who have the experience,

the expertise and the knowledge. For example, Barnwell in South Carolina has had a low-level radioactive burial site some fifteen years now, operated by Chem-Nuclear Systems. The same company also operates some hazardous and toxic substance disposal sites under a subsidiary, Chem Security. They're my idea of one of the better and more reliable companies.

e p: Do you think the background of the waste facilities companies should be investigated before they're allowed into North Carolina?

Greenberg: The companies should be investigated inside and out, backwards and forwards. There's one company that is reputed to be controlled by the Mafia. They came into this state asking for a storage facility and some kind of treatment facility. I understand state officials investigated and found there was no truth to the syndicate allegation. But it is true that this company has been cited by EPA on a heckuva lot of violations. So it has a clouded history. Whether it should have been licensed or not is not my concern.

That is one company that has raised some questions. There are other companies however, for example Waste Management Corporation, that have the resources to do the kinds of things we're talking about. There's also a company that runs a ship, Vulcanus, owned by the Dutch, which will, on contract, incinerate waste far out at sea. This is why we're recommending the private sector. We don't want the state supervising its own facility. The best thing would be to have a private firm do it, and have the state supervise and do all the necessary checking on it. That is exactly the way the Barnwell site is operated, and South Carolina is very happy with that operation. What South Carolina is unhappy about is that the entire country is using it as a dumpsite.

e p: That's a fear some people have expressed about a North Carolina facility. The courts have ruled that radioactive and hazardous wastes are included in free interstate trade laws; a state with a facility may not legally refuse other states' waste.

Greenberg: Congress passed last December the Low-Level Radioactive Waste Act of 1980. It goes into effect January 1, 1986. It authorizes states to band together to form mutual compacts with exclusionary powers. Right now, South Carolina has already taken the lead to form such a compact with seven adjacent states. Obviously, if we join them, South Carolina's going to want some *quid pro quo*. They'll say we want North Carolina or Tennessee or some other state to have a suitable back-up facility.

The Act applies, however, only to low-level radioactive waste. Right now there is no authority to bar any state from bringing its waste to any other facility. The National Governors Association has recommended that the President and Congress pass legislation similar to the Low-Level Radioactive Waste Act so that toxic and hazardous substances can also be handled the same way.

The problem is it's a Catch-22 situation. Without that legislation, any state that takes the lead runs the risk of becoming the dumping-ground of the nation. That's what happened at Barnwell. On the other hand, if the state doesn't start doing something now, and this legislation is passed, then it's left out in the cold. So you can't go too fast and you can't go too slow. What do you do? We feel that we better have some sort of waste management system in place, that we better be able to move quickly when action is needed.

e p: Though emphasizing prevention and minimization of wastes, the Task Force has determined that a facility is needed for final disposal of materials which can not be further treated or reduced in volume. The Task Force conclusion that this facility should be a landfill has been hotly disputed by citizens' groups favoring above-ground storage.

Greenberg: In all of the literature that has been published on the disposal of low-level radioactive and hazardous wastes, I have heard of nothing about above-ground storage. After the public hearing in Raleigh, a member of our faculty, at my request, called the Chief of the

Solid and Hazardous Waste Research Division of the EPA. This is the man who presumably knows more about hazardous waste than anybody in the country. I'm reading now from a note that was written to me by this faculty member: "He was not aware of any research or anyone proposing that hazardous waste be stored above-ground as a means of disposal. He suggested that above-ground storage, such as warehouses, storage tanks and bunkers, are part of the problem, and not a solution to managing these materials. He suggested that security requirements, weather, unusual storms (including lightning, for example), fire, increased temperature of contents, greater reactivity, and deterioration of the container would only mitigate against this alternative." I think above-ground storage would be probably the worst hazard imaginable for any waste that's ignitable or corrosive. One of the worst accidents that ever happened was in Elizabeth, New Jersey, where they were storing ignitable material and there was a fire that killed workers and caused millions of dollars in damage.

c p: One of the rationales for above-ground storage is the ease of recovering materials once this becomes economically feasible.

Greenberg: Ah, that's different. I think the first step is to classify the material. If it can be incinerated and destroyed, that would be the best thing. I would certainly never store anything above-ground that was ignitable or corrosive. Waste materials that are not ignitable, PCBs for example, you might be able to store for three to five years in the hope that technology will develop which will enable us to destroy or neutralize the substances. Above-ground might be better in that case. In other words, it's merely a temporary storage. It's not above-ground storage in a perpetual sense. Also, you would never use it for long-life low-level radioactive waste, but you would use it for those materials where you hope the technology would improve. If you keep looking at this stuff pile up day in and day out, it gives you more impetus and encouragement to try and push resources to find out how to detoxify it. On the other hand, it doesn't mean that when the material is above ground, it's safe. It creates a tremendous security problem. Accidents happen...

c p: What about fears of contaminating the groundwater supply through burial of the waste?

Greenberg: We don't want to put anything in the ground that's going to contaminate either surface or below-ground water. That's the problem with hazardous landfills. But of course Love Canal and some of those things were put in the ground over thirty years ago when there was very little known about the technology of how to site these things -- geologically and hydrologically. There's a lot that's been learned since then. In fact, the packaging is really clay. In addition to impermeable barriers of cement or some type of plastic, you should place a certain type of clay which is impermeable over it. When burial is done properly, as it is being done in some places it should be relatively safe. But nothing is perfectly safe. *Nothing* is perfectly safe.

c p: Let's look at the very controversial recommendation about pre-empting local government authority. I suppose you knew that it was going to be a major source of contention.

Greenberg: Of course. The final crunch comes down to this. We're recommending that everything be done if possible to get sites by local cooperation. By a site I don't mean necessarily burial -- it could be above-ground storage; it could be an incinerator; it could be a recycling plant. When we say treatment facility, we don't always mean landfill burial. If local zoning ordinances attempt to prevent siting -- and we're urging that every step possible be taken to develop local cooperation -- but if it becomes impossible to get any locality to be willing to accept one of these, the state's left with the responsibility. If you're going to have responsibility, you've got to have some authority. We hope the override is never invoked. In the same way, there's an analogy in the field of Public Health. If you have an infectious disease -- say tuberculosis -- you're infectious to your family, to your

friends, to everybody you come in contact with. Every effort is made to persuade you to accept care, to go to a treatment facility. If you absolutely refuse, the local Health Department has the police power to obtain a court order to send you to a treatment facility. In the thirty-five years that I've practiced Public Health in this state, I know of only one or two cases where the police power was actually invoked. There was one case locally where a recalcitrant individual refused to go. But the threat that he could be forced to go was enough to convince him. The police power is never invoked unless it's absolutely necessary. I would hope the same philosophy would apply to this authority to override "spot zoning" by local ordinance.

c p: The Task Force has been severely criticized for lacking sufficient opportunity for public participation. Does that surprise you?

Greenberg: That doesn't surprise me. I don't think the persons who make the criticisms are aware of what the constraints are. The constraint is that the Governor asked for the report by early January. We asked to extend those time limits by five or six weeks, so we have roughly until February 18 to make the report. We've had public hearings as much as we could. We've invited the public to every meeting -- every meeting of the Task Force is open. I've invited public comment at all of those meetings.

I and the two chairmen of the technical advisory committees have visited eight or nine newspapers in the state; I've been giving interviews to large numbers of television stations and we've held these seven public hearings throughout the state. There's a limit to what you can do and still get back to the Governor by the time limit in mind. This subject can go on forever. What we *need* to do is to have the Governor's Waste Management Board created, and that Board can continue to have public participation and public hearing. You can go on for public hearing forever and you're not going to get agreement. Nobody's going to come through and say yes, I want a burial site on my land.

In response to the Task Force draft report, no group has been as vocal as the Protect Our Piedmont Coalition. This league of citizens' groups has captured media attention, shown up in the hundreds at the Piedmont (Raleigh) public hearing, and has filed an official complaint with the Environmental Protection Agency against the Task Force public participation practices.

Bill Cummings is a long-term representative of the Friends of Chapel Hill, the group which organized the Coalition. He has worked as an environmental consultant, and is now writing his Ph.D. Dissertation on the ecology of underdevelopment in the Phillipines.

carolina planning: What is the "Protect Our Piedmond Coalition"? Is it basically a single issue group?

Cummings: The "Protect Our Piedmont Coalition" was formed late this fall, stimulated really by what we were learning was going on in Raleigh with the Governor's Task Force. It's composed of environmental, public interest, and poor peoples' groups, largely Piedmont-based. It has a number of concerns. The principal area that it has been working with right now has been the Governor's Task Force. But many of the groups involved have had a long-standing interest in nuclear waste, nuclear energy in the state of North Carolina, and the situation of toxic chemicals.

"Friends of Chapel Hill," the group that I'm actually a representative of, and that has taken a lead role in organizing the Coalition, is concerned with broad environmental questions that deal really with the future of this area. We're beginning to raise questions about how one can live here in a sustainable way; we're talking about the long-range future. Some of the things that are going on right now pose irreversible threats, will bring irreversible limitations to the flexibility that we have in our part of the Piedmont, and our region of the biosphere in general. "Friends of Chapel Hill" is made up of lots of families who have settled in and plan to raise their children. Hence, our slogan and one that was adopted by the Coalition, "It's our home, not their business."

c p: The Coalition has criticized the Task Force for its handling of public participation, and filed an official complaint with EPA. The Coalition in turn has been criticized for not attending the Task Force's open meetings, and for not knowing what was going on. How do you explain this contradiction?

Cummings: We've probably missed one, or two, or maybe three meetings at the most. We've had representatives at most of them. Our complaint wasn't whether or not we could be at those meetings; our complaint was that no one knew about those meetings. Agendas weren't being mailed out to the interested public or the news media. I don't think they were expecting any of the public to come. We felt they should have done a better job of letting people know.

Further, as we found out more about the Resource Conservation and Recovery Act, North Carolina was also in violation, if not the letter then the spirit, of the Act itself and the public participation guidelines: thirty to forty-five days notice, depending on the type of business that is going to be discussed, and adequate dispersal of relevant information. Clearly the state failed to do that. Way back in November, we began to point out some of the more serious flaws. In this most recent series of public meetings, when those weren't even spoken of or responded to in any serious way by the Task Force, we decided to make our formal complaint.

c p: Do you think a lot of the problems in public participation were due to a lack of time?

Cummings: Lack of time, but I think behind the lack of time was a lack of willingness to bend the schedule. The people were basically excluded by that. The specific reason was a lack of time, but the deeper reason was a feeling that people don't really need to be involved. Some of the Task Force staff share with me the feeling that the people of North Carolina were lucky to get as much as they did. The Task Force claims it is a special case and doesn't have to meet the RCRA guidelines. We felt that if the state was indeed sincere in involving the people, then it should have really made a complete effort, bent over a little bit to do that.

c p: Let's talk about your critique of specific Task Force recommendations. In the Coalition's January 19 press statement, you said: "The Governor's Task Force gave little attention to the real problem of hazardous waste: curbing new and continued generation of the waste." Yet the very first recommendation in the draft report is that the proposed waste management system should "emphasize prevention, resource conservation and recovery." These statements have a lot in common.

Cummings: There are parts of the Task Force's work that we agree with. One of our most basic critiques is that the teeth of these recommendations don't exist when one reads the report at a deeper level. On both the prevention of waste generation, and the minimization of the wastes themselves, the Task Force says the right words but unfortunately it's more lip-service than reality. The Task Force has pages and pages to say about a landfill or disposal site, and virtually nothing to say about either minimizing or recycling the wastes. About the closest they get is suggesting a "Governor's Award for Excellence." Somehow that's supposed to make all of this work out. So we felt that the real thrust of the report was calling for a landfill, and paying lip-service to other recommendations.

We also felt that the landfill idea itself was a shoddy one, and one that many technical people, as well as citizens concerned with safety, would take exception to. We found wide support for the call for above-ground storage.

c p: Why has the Coalition stated that "Underground burial is the cheapest, quickest, and most dangerous method of hazardous and low-level radioactive waste disposal"?

Cummings: None of these technologies are certain. They are evolving; there's a great deal no one knows about any of them. The Task Force and many of the state officials continually would say: "Well, this is going to meet EPA guide-

Bill Cummings. Photo by John Gaadt

lines. We don't have to worry about that part of it -- we are going to do what they say." When one goes a step deeper, one finds that the EPA itself isn't sure what to say, and maybe isn't saying the right thing according to some people. Underground disposal is certainly the cheapest, and the simplest. It's basically a hole, and the stuff is out of sight and out of mind.

This relates in part to another thing we feel doesn't receive adequate emphasis from the Task Force, the fact that 'disposal' may indeed be the wrong word. For many of these things, there isn't any disposing of them at all. Many of the radioactive materials and indeed some of the chemical ones remain toxic, remain radioactive for thousands of years. 'Disposal' may give a false sense of confidence, of security. Just a few days before the January 19 Task Force meeting, the Council on Environmental Quality announced that, according to their study, thirty-two states are now experiencing severe groundwater contamination. The likely cause, they felt, was industrial dumping that's finally appearing in the groundwater. Well, as far as we're concerned, that's permanent. We feel that below-ground storage is just a way of getting the stuff out of sight.

There's no telling what it's going to do down there.

e p: What about fire and security risks of above-ground storage?

Cummings: We think the security risks posed by above-ground only look greater because we haven't considered the full dimensions of the long-term security risks posed to one of our most basic needs -- clean water -- that are posed by putting wastes underground.

Moreover, if we take the optimistic view about our technological prowess, there may turn out to be ways to detoxify some of these things later, and indeed some of them may become worth something. By storing them and monitoring them, they'll be around to detoxify or to use.

It may well be that the cost of storing some of these things above-ground, I mean the real cost of safety, is so high that a lot of products that are being consumed now -- if one were to pay the full cost -- would be too expensive for anyone to buy. But we're all in favor of finding out what those products are.

e p: What do you think about requiring product labels to disclose product-related hazardous wastes?

Cummings: That would be one part of a much broader critique and alternative program that we intend to raise. Much of our criticism has not been directed to just the Task Force itself, but to the Governor. The Task Force in reality was given a very limited charge. It wasn't to look at what happened in the past; it wasn't to look so much at the generation of waste; it wasn't to look at what sort of industries should come to North Carolina; it was given a very tiny portion. Unfortunately, no one else in the state was given any of the other portions in an effective way. There never has been a coordinated and comprehensive look at past, present, and future hazards to people living in North Carolina.

So, part of our concern has been with the Governor's industrial development policy, including

the Department of Commerce. It doesn't make much sense to talk about protecting the public from hazardous waste as long as we continue to be the most aggressive state in seeking out and soliciting toxic waste generators. It's a contradiction. As alternatives, we feel there are lots of creative directions. We could be a real leader instead of chasing a probably false idea; instead of chasing after other states.

c p: Do you believe North Carolina should have any hazardous or low-level radioactive disposal sites?

Cummings: We may accept, and perhaps have a responsibility to accept, low-level waste generated by medical research and medical treatment and present corporations. But we're not prepared to accept waste generated by the nuclear industry, by utilities, which, if plans that exist now are completed, will steadily increase. There are other groups in the Coalition that may not endorse that in exactly the same way. I guess that overall, as a coalition, and as a group of concerned citizens our feeling is that these are the kinds of questions that North Carolinians want to participate in, and our biggest complaint is that they haven't had that chance.

As for hazardous waste sites, I guess in some ways the answer would be the same. We have a responsibility -- I think people are willing to shoulder it in North Carolina -- for wastes that are presently being produced. But it's a responsibility that I think many people are not prepared to accept without knowing at the same time that they have some power; that they're going to play a full role in a dialogue with our state leaders about what kind of future we're going to have here. It may be desirable to phase some industries out. In the last few years North Carolina has made somewhat of a shift in its industrial mix, as a result of what kinds of industries are being attracted. Examples are a number of companies that essentially produce for the auto industry, producers of metal-plating and so forth. Well, there's a question as to whether North Carolinians should bear the cost of such products when the benefits are really enjoyed by people outside the state. It's the same with Carolina Power and Light in the situation with hazardous radioactive waste. That company is owned largely by people outside the state. So there's a question of equity involved as well. All these things are related to the question of whether people will accept a radioactive or toxic waste disposal site.

c p: Assume we have this responsibility, for the time being at least, and a facility needs to be set up. What about the condemnation issue? The Coalition stated "No state agency should have the right to condemn land for a hazardous waste site." Would anyone willingly accept a site in their backyard?

Cummings: We're not sure. We do feel though that as it stands now they probably wouldn't. That should be a good message for some of our policy-makers to get. People in state government seem to think the reason that people are scared is that they don't have the information, that it's complex technology, and that people don't have the brains to make competent decisions. We reject that logic. There are technical aspects to it, but it's not a technical decision. It's a decision that any citizen has both the right, and the legitimate ability, to be involved in. We think more than just fear is the fact that people are not satisfied with the state's or private industry's ability to speak to their needs. The state has consistently failed in North Carolina to protect the public from both chemical and radioactive hazards, and in the few cases where there have been emergencies, has dramatically demonstrated its incompetence, for example with the PCBs.

c p: What, then, is the proper role for the government in waste management?

Cummings: That's a good question, one we think needs a lot more talk. Essentially the Task Force is throwing it off to the so-called private sector. It's interesting that some real problems were revealed in the way the state would do even that. Three days before the new RCRA guidelines went into effect, the state Department of Human Resources

granted a permit to the SCA Corporation in Mecklenberg County to begin a treatment facility for hazardous waste. Well, SCA has been indicted, implicated and connected to the Mafia by grand juries and by reputable newspapers all over the country. The state has been totally irresponsible in its evaluation of private industry in the area of waste management so far. The Department of Commerce has been required for three years to do environmental evaluations of new firms coming into North Carolina, and has never done that. That was pointed out to them and their answer was, well we haven't done it -- you're right -- and probably what we should do is get rid of the law. That's the kind of cavalier attitude towards the public trust that they take. Right now the state has no comprehensive body that is charged with the protection of the environment in general.

c p: What incentives would persuade private industry to deal adequately with the hazardous waste problem?

Cummings: I don't know if it's a question of incentives or of sanctions and penalities -- probably a mixture of both. Tax incentives, for example, could minimize the amount of waste produced, by encouraging recycling and so forth. It may be just a way of forcing them to accept good common sense. A recent article in *Forbes* magazine pointed out the fortune to be found in wastes. I think many corporations are realizing that -- that'll go a long way.

One of the Task Force recommendations was a misdemeanor penalty for some violations. We feel there needs to be much stronger teeth. We've seen with the PCB dumping episode that we're left very vunerable and unable to respond legally in any way that would ultimately send a message to industry to prohibit further instances of that kind of irresponsibility.

c p: What about the question of liability?

Cummings: We're in favor of strict liability. The argument against that is that certain industrial practices would become prohibitively expensive because of high insurance costs. Our response is that if the insurance companies won't insure it, then maybe it's not the kind of thing we want to see happening in our state. Indeed, if we're going to have the continued production and use of these poisons, the least the public can expect is that if there's damage, the measure of liability should be quite strict. One doesn't have to prove negligence.

c p: What is your assessment of how serious North Carolina's waste management problem is right now. How essential is it that we take action?

Cummings: Every indication we get is that our awareness of present problems related to hazardous waste and nuclear waste in the state is really just the tip of the iceberg. There's some controversy within state government itself about the extent of past dumping sites. The Eckhardt Committee reported on 125 sites in North Carolina, twenty of which they considered to be serious health threats. At a meeting the other day, of the Triangle J Hazardous Waste Subcommitte, the chairman referred to santary landfills as miniature Love Canals in themselves.

We think that North Carolina was spared the kinds of problems now facing other states; but the state has not been nearly as aggressive as it should be in taking care of past problems, in identifying them. In many ways, we think the state has acted to try to reassure the public, but isn't prepared to take the kinds of actions or adopt the kinds of measures that would provide real safety to its citizens. We're hoping that many of our concerns will be included in the final draft of the Task Force report. Our experience would lead us to believe that this may be an unreasonable hope. Nevertheless we continue to believe that people can affect and have some impact on their government. If not, we'll take the next step at some future date. I guess the message we have sent so far is that we're going to be involved one way or another, and we'll do it on our terms, not theirs. It's our home and not their business.

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Barking Up The Right Tree?

Wood as an alternative energy source appeals to a wide segment of American consumers for a variety of reasons: it requires low technology systems to produce energy; it is a replenishable resource; and it is relatively cost efficient. In many ways, wood as an alternative energy source is a godsend. Under the right conditions, it permits self-sufficiency and saves money. The use of wood is tempered though, by environmental, health and safety considerations. It is important not to let the benefits of heating with wood obscure the very real environmental hazards inherent in wood energy use. Uncontrolled, the highly concentrated pollutants emitted by wood combustion can only hasten the deterioration of environmental conditions. In addition, it is unrealistic to assume that wood supplies will remain stable given the current pace at which wood burning is escalating. The use of wood as an alternative energy source demands some government attention. Wood energy users might also benefit from instruction regarding the use of this valuable resource.

COSTS

The appeal of residential wood heating to consumers is attributed to three features: attractive appearance of wood stoves, renewability, and cost savings of wood. Cost savings are probably the strongest incentive for heating with wood.

The cost of a wood burning stove can range anywhere from seventy-five to eleven thousand dollars, depending on the design. An airtight stove with a thermostatically controlled damper can be purchased for three to four hundred dollars. Adding installation and inspection, the initial cost reaches five hundred dollars. Payoff in terms of lower heating bills increases the benefits of wood heating.

"COST SAVINGS ARE PROBABLY THE STRONGEST INCENTIVE FOR HEATING WITH WOOD."

Local costs of conventional fuel and wood are crucial factors in calculating the wisest heating choice. In rural areas a cord of wood can frequently be bought for as little as thirty dollars, and can sometimes be acquired for no cost if the user is willing to cut his own. Inaccessibility and ensuing transportation costs make wood a questionable bargain for the urban dweller. The cost of wood is already prohibitive in many urban areas.

SAFETY

An important consideration in the selection and installation of wood stoves is safety. Wood stoves are either radiant or circulating. Radiant heaters have a single wall that acts as both the fire box and the outside surface of the heater. Circulating heaters have a second wall which surrounds the fire box, reducing the danger of burns. Southern Building Code Congress International and the Building Official Code Administration specify safety points for stove installation which address location, clearances for shielded and unshielded materials, flue pipes, and chimneys.

Creosote build-up is the most common cause of chimney fires. Creosote is the condensation of unburned gases and tar-like liquids on the chimney interior. The amount of creosote which forms in a chimney is affected by moisture content of the wood, height of the chimney, flue gas temperature, firing rate, ambient air temperature and humidity, and air setting. Reducing the smoke emitted is of primary importance for creosote reduction and can be achieved by allowing more air into the fire at the sacrifice of some of the stove's efficiency.

The following factors reduce the hazards associated with residential wood burning:

1. permits for the installation of wood heating devices;

2. installation inspection by a certified National Fire Protection Association (NFPA) inspector;

3. annual chimney inspections where permits have been issued;

4. installation of smoke alarms and fire extinguishers at the time of initial stove installation; and,

5. safety and installation workshops by NFPA to be sponsored and publicized by retailers.

Ultimately, the issue of safety in the use of wood heating appliances rests with the individual operator. Cooperation between the retailer (in selling the stove best suited to the buyer) and the manufacturer (in distributing guidelines for safe stove use) should contribute to safe and wise use.

ENVIRONMENTAL IMPACT

Burning wood emits both particulate and gaseous pollution. Particulates in wood smoke are liquid or solid particles ranging from microscopic to easily visible. They are due to the incomplete combustion of wood. Of the many compounds which exist in the organic fraction

of particulates, polycyclic organic matter (POM) is the best known. Harmful POM compounds include carbon monoxide, nitrogen oxides, and volatile hydrocarbons (EPA, 1980).

Emissions from woodburning stoves are categorized as criteria or noncriteria. Ambient air quality standards (AAQS) exist for criteria emissions; several of the noncriteria emissions, which can be environmentally hazardous, are left unmonitored (Kieron, et. al., 1979). Surveys and modeling studies suggest a significant air quality impact from residential wood combustion sources as early as 1976. As a result, the Environmental Protection Agency (EPA) is considering new air quality standards which would regulate emissions from residential wood combustion sources. They are currently exempt from state and local air pollution control regulations. The Clean Air Act Amendment of 1977 requires that all newly installed wood stoves in nonattainment areas incorporate pollution control technology that will yield the lowest possible emission rates.

W.D. Snowden's EPA report, "A Preliminary Study of Woodburning Stove Emissions," offers a thorough analysis of residential wood combustion. During the stable burning cycles emission levels are influenced by wood type and moisture content, firing rate, stove design and excess air ratio. Education of the residential wood burner is the first step in reducing emission levels, as the conditions which keep emission levels low are controlled by the stove operator.

Organic compounds, trace elements, and certain gases in combination with fine particulates can have serious health effects even in low concentrations. Pollutants in a stagnant air mass can accumulate to levels which are especially hazardous for individuals with respiratory problems. Communities are just beginning to express apprehension about the adverse health effects of wood burning stoves. If a large number of people grow to depend on residential wood combustion as their primary heat source, instances of acute air pollution will intensify. Exposure to the pollutants attributable to wood combustion needs to be studied over time and in different regions to evaluate the health impacts accurately. The potential health risks of priority and carcinogenic pollutants from smoke, however, need immediately to be drawn to public attention.

RECOMMENDATIONS

Health, safety and environmental impacts of the use of wood as an energy source indicate the need for public education and government regulation.

Short courses in wood lot management, safety, emissions control and efficiency should be strongly encouraged by local EPA offices. Retailers should advertise and make available this information, and perhaps offer workshops themselves. Tax incentives could be provided if necessary. Wood stove permits should be required, their issuance contingent upon passage of a wood burning stove operator's examination.

All wood stove manufacturers should be required to develop an emissions test program to determine the pollution efficiency of their products before marketing. An important step toward reducing emission levels and promoting the redesign of wood stoves, would be to include wood heater emissions in the ambient air baseline. Attachment devices, such as catalytic converters, for use on wood stoves already in operation should be encouraged.

Given the tremendous growth of the industry in recent years, adoption of some responsibility for air quality degradation by wood stove manufacturers is not unreasonable. If wood combustion source emissions continue to go unmonitored, the likely outcomes for all wood-using industries are increased control and reduced growth. These results are inequitable and are likely to provoke industry resistance.

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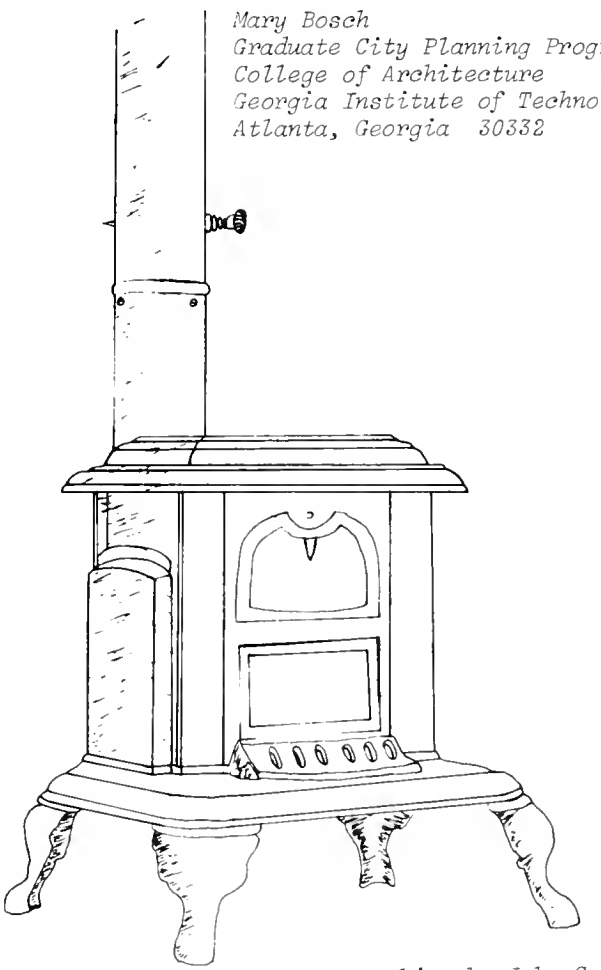
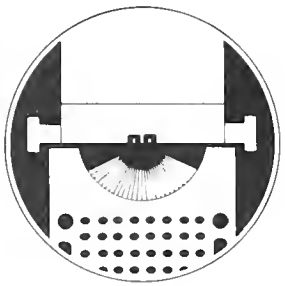


Graphics by John Gaadt



Letters

Worker-Owned, Worker-Controlled

> "It's not socialists who are leading these worker-takeover drives; they arise out of the pangs of desperation, out of hunger. Rank and file workers, bankers, small merchants, and mayors are faced with a desperate choice of whether they're going to keep that plant open or whether they're going to survive on government bandaid welfare."
>
> -- Daniel Zwerdling, author of *Workplace Democracy*

More than eighty planners, state and local officials, community activists and a manager of a worker-owned design company met on January 23, 1981, at the University of North Carolina in Chapel Hill to learn more about worker-owned and worker-controlled enterprises.

For many communities faced with the announcement by a large company to close the local plant, conversion to worker-ownership has kept the plant open, avoiding the layoffs and their imminent impact on the community's economy.

Rick Carlisle, from the North Carolina Department of Natural Resources and Community Development, pointed out several other benefits of worker-ownership in addition to job-retention: locally-owned firms tend to have more stable employment, grow more rapidly and have greater purchases of inputs from the community than firms that are privately-owned. Secondly, a firm which is locally-controlled will be more responsive to community needs.

There are several forms of worker-ownership, one of which involves an Employees' Stock Ownership Trust (ESOT). Christopher Gunn, assistant professor of economics at Hobart and William Smith College, explained that an ESOT is a trust fund which enables employees to own stock in the company. Most often, ESOTs are used as a means of generating capital for corporate financial objectives, although in a few instances they have been used as a mechanism for worker-ownership of the corporation. Cites Gunn, "Given all the evidence for the success of worker-participation programs -- including the ability to make employees happier and to raise productivity -- we have to ask, 'Why don't we see more of them?'

"Because they are fundamentally threatening. Management is not quite sure where they stop. They become threatening to mid-management, and, if they go far enough, could conceivably become threatening to the entire process of private capital-accumulation."

For this reason one must distinguish between worker-ownership and worker-control or worker-management. A worker-owned firm is often no different from a traditionally-financed firm. In a worker-managed firm, employees participate in decisions regarding the operation of the firm.

Daniel Zwerdling, attempting to demystify the process of becoming a worker-owned firm, provided a guide to the steps necessary in conversion to worker-ownership:

1. *Raise the idea* Workers are often not aware that there are alternatives which would enable them to keep their jobs when management announces the closing of the plant. This is where the planner can help.

2. *Get community support* for the idea through a community organizing campaign. The support of union leaders, local merchants, public officials and the people of the community is essential to obtain financing from local bankers as well as federal agencies.

3. *Raise money* Zwerdling emphasized the need for creative financing packages. Possible sources of funds include:

- ESOT,
- Employees postpone benefits and/or wage increases,
- Small Business Administration (SBA) has been pressured by Congress to be more responsive to worker-owned enterprises,
- Farmers' Home Administration (FmHA),
- Department of Housing and Urban Development (HUD) -- Community Development Block Grants, and
- Coop Bank in Washington, D.C. -- initially funded by the U.S. Treasury Department to give technical assistance and loan packages to consumer and producer cooperatives.

4. *Every* part of the conversion process must be discussed in advance, including such questions as who would own stock, how to decide the allocation of stock (by salary or one person-one vote?), who would manage the enterprise and make policy decisions, and so forth.

Christopher Gunn pointed out that when employees establish an ESOT, it is imperative that they understand that they are buying control. Using the conversion to worker-ownership at Rath Packing Company in Waterloo, Iowa as an example, Gunn explained that, "The workers involved understood that when the process (of setting up an ESOT) was done, they would be in a position of strength, not in a position fundamentally weakened by having stepped out of a traditional relationship with management. Workers were able to gain control because they were in a position to bargain effectively over the terms of purchase (of stock). They were essentially buying that control."

Further, Gunn pointed out the contrast in establishing an ESOT: "On the one hand, it is rather radical, because worker-control is involved. On the other hand, it is in the tradition of private ownership. The right to manage is being bought; traditional property rights are used as the vehicle for control."

According to Gunn, support for employee-ownership has come from some surprising sources. Several bills have been through Congress in the past four years to which certain clauses have been added that helped open up federal programs to worker-ownership. There are even some conservative, big-business supporters, including President Reagan and Senator Russell Long, who have advocated worker-ownership through ESOTs as an inexpensive source of new capital.

"The benefits of worker-ownership," said Daniel Zwerdling, "go far beyond the work-place itself. In every community where employees and community groups have helped save a firm, there is a new feeling of self-sufficiency, a new awareness of the influence they can have in decision-making in their community.

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State and Local Hazardous Waste Management — A Framework for Action?

The management of hazardous waste has been referred to by many experts in the field as the environmental problem of the 1980s. Recognition of the problem, however, began and grew throughout the 1970s. For example, Section 212 of the Resource Recovery Act of 1970 required that the Environmental Protection Agency (EPA) prepare a comprehensive report to Congress on the storage and disposal of hazardous waste. In the 1974 report, EPA concluded that the prevailing methods of hazardous waste management were inadequate and resulted in the uncontrolled discharge of hazardous waste residues into the environment (U.S. EPA, 1977). As a result, the Administration proposed that Congress enact legislation to prevent dangerous and environmentally unsound hazardous waste treatment and disposal practices (U.S. EPA, 1977). Congress responded by enacting the Resource Conservation and Recovery Act of 1976 which is aimed at the regulatory control of hazardous waste from its generation to its ultimate disposal. Thus, throughout the 1970s there was a growing concern at the federal level over the risk posed to the public health and the environment from improper hazardous waste disposal practices.

News of Love Canal raised the hazardous waste problem to its present level of public notoriety. Since then, many problems resulting from past and present disposal practices have surfaced. Some of the more infamous include the Valley of the Drums in West Point, Kentucky, the PCB spill along highways in North Carolina, and the huge fire at an Elizabeth, New Jersey storage and disposal site. These environmental catastrophes and many others of a similar nature have pointed out the possible severity of the nation's hazardous waste problem. In its 1979 report on hazardous waste disposal, the Subcommittee on Oversight and Investigations of the House Interstate and Foreign Commerce Committee summarized the situation:

> "The hazardous waste disposal problem cannot be overstated. The Environmental Protection Agency (EPA) has estimated that 77,140,000,000 pounds of hazardous waste are generated each year, but only 10 percent of that amount is disposed of in an environmentally sound manner. Today there are some 30,000 hazardous waste disposal sites in the United States. Because of years of inadequate disposal practices and the absence of regulation, hundreds and perhaps thousands of these sites now pose an imminent hazard to man and the environment. Our country presently lacks an adequate program to determine where these sites are; to clean up unsafe active and inactive sites; and to provide sufficient facilities for the safe disposal of hazardous waste in the future" (U.S. Oversight and Investigations Subcommittee, 1979).

HAZARDOUS WASTE PROBLEMS IN NORTH CAROLINA

Unfortunately North Carolina has not escaped its share of problems stemming from improper hazardous waste management. Two examples illustrate this point effectively. Between July 27 and August 3, 1978 a total of 211 miles of roadway shoulder in fourteen central and eastern Piedmont counties were contaminated with polychlorinated biphenols (PCBs). It was determined that 30,000-35,000 gallons of liquid PCB waste was deliberately discharged along the roadside from a passing truck, resulting in the contamination of 40,000 cubic yards of soil. State officials, aware of the potential hazards posed by PCBs, attempted to develop control strategies for cleaning up the contaminated soil. Alternate strategies included removal and disposal of contaminated soil in a chemical waste landfill, treatment in place with activated carbon to stabilize the PCBs, and a "do nothing" alternative (Bulman, 1980). Two and one-half years after the PCB dumping incident, the

Terrence K. Pierson will complete the M.R.P. program at the University of North Carolina in May 1981 with a concentration in environmental and land use planning. He has just finished a two-year study on hazardous waste management practices across the country.

state has not found an acceptable solution to the problem.

In Flemington, North Carolina, a small community of 100 people in the northwest corner of New Hanover County, the groundwater used as a water supply for thirty-three residential and ten industrial wells was found to be contaminated with hazardous chemicals that had leached from a nearby landfill operated by Waste Industries, Inc. According to EPA investigations in 1979, chemicals found in sufficient levels to affect human health include: tetrachloroethylene, benzene, trichloroethylene, 1,2-dichloroethane, vinyl chloride, methylene chloride and lead. In addition, chlorides, dichlorophenol, chlorobenzene, iron manganese, phenol and zinc were found in levels to make the water unfit for human consumption because of odor or taste problems (U.S.A. v. Waste Industries et.al.). In April 1979, EPA and the North Carolina Division of Environmental Management warned the residents not to drink the water from their wells. A rudimentary temporary water supply system was set up for the residents by New Hanover County. The landfill was closed in June of 1979 when capacity was reached.

Also in June 1979, the Flemington Residents Association filed suit against both the county and Waste Industries, Inc. in North Carolina Superior Court. The plaintiffs are seeking abatement of the nuisance, restoration of the groundwater to its prior condition, and provisions from the county for a permanent and convenient supply of water to residents of the Flemington community. There are many third party defendants in the case, including the State Department of Human Resources, which has responsibility for granting landfill operation permits, and the Division of Environmental Management, which has responsibility for monitoring groundwater (Sanford, 1980). The case is still before the North Carolina Superior Court.

"TWO AND ONE-HALF YEARS AFTER THE PCB DUMPING INCIDENT, THE STATE HAS NOT FOUND AN ACCEPTABLE SOLUTION TO THE PROBLEM."

EPA, after continued monitoring and testing of the groundwater, filed suit in federal District Court against New Hanover County, Waste Industries, Inc. and the owners of the landfill in January 1980. The suit is brought under the provisions of Section 7003 of the Resource Conservation and Recovery Act of 1976. EPA is seeking injunctive relief and requesting that the county be required to supply the Flemington residents with a suitable permanent supply of water and to restore the quality of the groundwater. This case has not yet been brought before the court.

EPA estimates that only 10% of hazardous waste are disposed of in an environmentally sound manner. Photo by Lee A. Krohn

There are numerous examples of environmental and public health problems caused by the improper disposal of hazardous waste in North Carolina, including the contamination of the Kernersville water supply and the illegal dumpsites found in Mecklenburg County. All of these incidents illustrate that North Carolina has a hazardous waste problem. The crucial question is the extent of the hazardous waste problem in the state.

North Carolina is ranked eleventh in the United States in the generation of hazardous waste. The North Carolina Department of Human Resources estimates that the state generates 120 million gallons of hazardous waste annually. Over half of this quantity is generated by seven industries: Chemical and Allied Products, Machinery, Textile Mill Products, Fabricated Metal Products, Electrical Machinery and Electronics Equipment and Supplies, Primary Metal Industries and Printing and Publishing (NC Dept. of Human Resources, 1978).

One major problem faced by North Carolina is that there are no licensed disposal sites within the State where this waste can be deposited. At present, hazardous waste that is properly disposed of is being shipped to the

licensed SCA Services Corporation hazardous waste landfill in Pinedale, South Carolina, or the Waste Management, Inc. landfill in Livingston, Alabama. However, a 1979 survey of major American chemical firms by the U.S. House Subcommittee on Oversight and Investigation identified 125 sites in North Carolina where industrial chemical waste had been disposed of in unlicensed facilities. The primary methods of disposal used at these sites included pits, ponds, and lagoons; incineration and land farming. The highest concentration of these sites is in Mecklenburg County (26), Guilford County (21), New Hanover County (13), Cumberland County (13), and Wake County (9) (U.S. Oversight and Investigations Subcommittee, 1979). The hazard posed by these sites and others that have not yet been identified is unknown. At present the Department of Human Resources is monitoring some of these sites to assess the potential threat to the health and safety of nearby residents.

These problems resulting from the improper management of hazardous waste point out at least three major issues that the state must deal with: 1) the regulation of hazardous waste generated within the State to ensure that environmentally safe management practices are used; (2) the identification and monitoring of sites used for hazardous waste disposal in the past; and (3) the clean-up of spills and disposal sites that pose a risk to public health or the environment.

STATE RESPONSE

There are four state acts which control hazardous substance generation, discharge, transport, disposal, and/or treatment. These acts are: The Solid Waste Management Act, the Oil Pollution and Hazardous Substances Control Act, the Toxic Substances Control Act, and the North Carolina Radiation Protection Act. Some of these laws were significantly amended during the 1979 North Carolina legislative session (Heath and Postel, 1979).

SOLID WASTE MANAGEMENT ACT (G.S. 130, Art. 13B)

This Act was essentially rewritten during the 1978 special legislative session and was again amended by the General Assembly in 1979. The act establishes the Department of Human Resources(DHR) as the single agency responsible for implementing all state and federal legislation on solid and hazardous waste management. The Department is authorized to "engage in research, conduct investigations and surveys, make inspections, and establish a statewide solid waste management program." Additional state authority is granted to the Commission for Health Services (CHS) to promulgate rules for the "establishment, location, operation, maintenance, use and discontinuance of solid waste management sites and facilities," which are to be enforced by DHR.

The Act directs CHS to promulgate and DHR to enforce rules for hazardous waste management. These rules must provide for:

(1) Record-keeping and reporting (and inspection of such records) by generators, transporters, and facility operators and owners;

(2) Use of appropriate containers, and proper labeling and transportation of hazardous waste, including a manifest system;

(3) A permit system governing the establishment and operation of hazardous waste facilities, and proper maintenance, operation and monitoring of such facilities;

(4) Standards governing treatment, storage, disposal, location, design, ownership and construction of facilities;

(5) Analyses of hazardous waste samples;

(6) Plans to minimize unanticipated damage;

(7) Plans providing for the establishment and/or operation of one or more hazardous waste facilities, in the absence of adequate hazardous waste facilities established or operated by any person within the State;

(8) Criteria for identifying characteristics of hazardous waste.

Under RCRA, the rules promulgated by the State may be no less stringent than federal EPA regulations. Additionally, as a result of 1979 amendments, CHS is authorized to adopt hazardous waste rules which are no more stringent than the federal regulations. Thus, CHS is authorized to adopt rules that are essentially the same as the federal regulations that were promulgated by EPA in February and May of 1980. These regulations provide a cradle-to-grave manifest tracking system for hazardous waste; provide criteria for the identification and listing of hazardous waste; set standards applicable to generators and transporters of hazardous waste; and set standards and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities (45 Federal Register 33063). CHS has instituted these regulations, and in January 1981, North Carolina became the first state in the Southeast to receive interim authorization from EPA to manage the State's hazardous waste program.

DHR may delegate authority to municipalities or counties to perform any portion of the state management program within a local government's jurisdiction. At present, DHR has not delegated such authority to any local government.

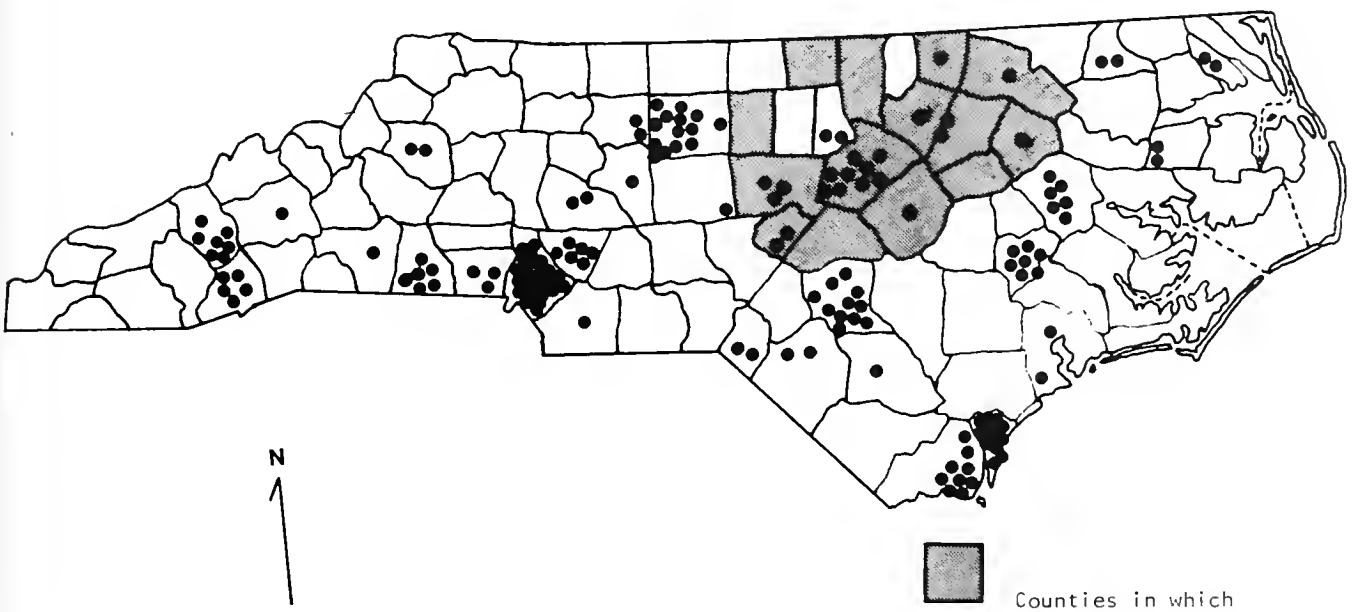
OIL POLLUTION AND HAZARDOUS SUBSTANCES CONTROL ACT OF 1978 (G.S. 143-215)

This Act gives the State's authority for response to hazardous substance emergencies, as defined under RCRA, to the Department of Natural Resources and Community Development (NRCD). Prior to 1979 amendments, this Act only applied to the intentional dumping of hazardous substances in water (Heath, 1979). The Division of Environmental Management (DEM) within NRCD is given permitting authority over all sources of water pollution discharges. This Act also authorizes NRCD to use available staff, equipment, and materials "to collect, investigate, perform surveillance over, remove, contain, treat, or disperse oil or other hazardous waste substances illegally discharged onto the land or into the waters of the State and to perform any necessary restoration." Activities authorized under this subsection must be in compliance with the National Contingency Plan established pursuant to the Federal Water Pollution Control Act. Also, the N.C. Department of Transportation is specifically authorized and required to have trucks located around the State ready to facilitate clean-up operations.

Amendments to the Act establish new liability provisions for damage to public resources. Procedures are established by which NRCD may assess and collect damages before any court appeal proceeding. The Department's damage cost estimate is prima facie evidence of the actual costs. DEM is also allowed to recover investigation costs as part of the overall damages collected.

The essence of this Act is emergency action to deal with illegal discharges. The 1978 and 1979 amendments are, in part, a response to the PCB spills along North Carolina highways. When this dumping occurred in 1978 the State lacked an emergency plan for toxic waste accident response. At that time the North Carolina Department of Crime Control and Public Safety coordinated efforts to direct and initiate State action pertaining to PCB spills. Other agencies involved in a response effort were the Department of Human Resources, the Department of Natural Resources and Community Development and the Department of Transportation (Bulman, 1980, p. 18). Also, at the time of this dumping the State had no liability provision to recover damages resulting from such actions.

Reported Possible Hazardous Waste Disposal Sites



Source: EPA, U.S. House Subcommittee on Oversight and Investigations, Greensboro Daily News

TOXIC SUBSTANCES ACT (G.S. Chap. 981 (H-5-6))

The Toxic Substances Act was enacted in 1979 to control the disposal of specific toxic substances. Within this Act, toxic substances are defined as specified heavy metals (mercury, plutonium, selenium, thallium and uranium) and specified halogenated hydrocarbons (PCBs and Kepone). This Act makes it a felony to dump, incinerate, or otherwise dispose of any toxic substances, as here defined, in the waters or on land, except where it is conducted pursuant to federal or state law, regulation or permit. Violators are subject to a fine of $100,000 per day, imprisonment or both.

The Act also designates the Department of Crime Control and Public Safety as coordinator of State agencies' initial response to toxic or hazardous substance critical incidents. This Act can be viewed as a legislative response to the 1978 PCB dumping incident.

NORTH CAROLINA RADIATION PROTECTION ACT (G.S. 104E)

This Act establishes a single system for regulating radiation sources within the State. The Department of Human Resources is designated to administer the statewide radiation protection program. DHR is authorized:

(1) To conduct ongoing studies of radioactive source control;

(2) To require submission of plans on proposed design of radioactive installations and on proposed systems of radioactive waste disposal;

(3) To maintain records of license applications and denials;

(4) To maintain a statewide environmental radiation program for monitoring radioactivity levels in the environment; and

(5) To implement all provisions of and regulations promulgated under the Act.

The Act creates the North Carolina Radiation Protection Commission within DHR which is authorized to promulgate rules and regulations within the radiation protection program. The Commission is authorized "to require licensing by DHR of all persons producing, selling, utilizing, or otherwise disposing of radioactive material to ensure compliance with promulgated rules and regulations." It also requires the Commission, or designee, to hold a public hearing in the country where there is a proposal to operate or enlarge a radioactive waste treatment or disposal facility.

Local governmental or board of health ordinances, resolutions, or regulations relating to source, by-product or special nuclear materials are not superseded by this Act, provided they are consistent and compatible with provisions of the Act, and with rules and regulations promulgated by the Commission.

ANALYSIS

North Carolina's existing management framework for hazardous and low-level radioactive waste consists of extensive regulatory programs for both types of waste; established procedures for responding to emergencies related to waste spills, accidents or illegal dumping; procedures for cleaning up spills that pose a dangerous threat to human health; and liability provisions for damage to public resources.

An important link in this regulatory program for hazardous waste is still missing, however. The regulations establishing performance standards applicable to owners and operators of facilities for the treatment, storage, and disposal of hazardous waste have not been promulgated in final form by EPA. Such standards will presumably include requirements concerning recordkeeping, monitoring, training of personnel, and financial responsibility (Governor's Task Force Draft Report, 1980, p. 23). The State had adopted EPA's proposed standards for such facilities which were effective from September 1979 to November 19, 1980 so that construction of new facilities could be permitted. At present, the State is waiting for EPA's standards for these facilities to be finalized. Existing facilities that applied for interim permits before November 19, 1980 have been allowed to continue operation until the final standards and permitting processes are in place. There were 270 applications for interim permits in North Carolina. The majority of these permits were issued to generators for the storage of hazardous waste on-site. Other permits were issued to facilities having incinerators or other treatment processes (Breckling, 1981).

In reviewing the state's regulatory and legal framework for managing hazardous waste, certain defects become obvious: the approach is piecemeal, lacking in long-term perspective, and still incomplete. Most of these laws and regulations have been in place less than two years. In effect, the 1979 amendments to these laws can be viewed as a reaction to the PCB spill and other hazardous waste problems that have come to light in the past several years. In an effort to develop a more comprehensive management system for hazardous waste and low-level radioactive waste, in July of 1980, the Governor assembled a Task Force to address this issue.

THE GOVERNOR'S TASK FORCE ON WASTE MANAGEMENT

The Governor's Task Force on Waste Management is composed of nineteen members from departments within State government, the State legislature, industry, local government, the university system, and citizens-at-large. The goals of the Task Force include:

(1) Determine the need for North Carolina to develop the capacity to manage hazardous and low-level radioactive waste;

(2) Recommend a comprehensive waste management strategy;

(3) Recommend the appropriate roles for the public and private sectors to respond to the needs of the comprehensive waste management system;

(4) Review current laws and regulations governing these wastes and recommend any necessary changes;

(5) Make management recommendations for the ongoing planning, implementation, and monitoring of the State's comprehensive waste management system; and

(6) Propose necessary legislation to enable North Carolina to begin implementing a comprehensive waste management system (Governor's Task Force Draft Report, 1980, p. 7).

Inadequate disposal of hazardous wastes has raised concern over public health risks. Photo by Tim Hergenrader

The efforts of this Task Force have resulted in a Draft Report issued on January 12, 1981 for public review and comment. Seven public hearings were scheduled in January in different cities throughout the State. The purpose of these public hearings was to elicit public response to the Draft Report. The Task Force Draft Report will undergo modifications based on comments made at these public hearings and the Final Report was presented to the Governor on March 9, 1981.

Without going into detail, a few of the major issues and recommendations of the Task Force's Final Report are presented below.

The major emphasis of the report is on prevention, resource conservation and recovery to minimize the volume of waste buried. With regard to resource conservation and recovery of hazardous waste, the Report recommends in-plant process modifications that reduce specific toxic substances in the waste stream or that recycle waste; off-site facilities that provide thermal treatment (e.g. incineration), chemical treatment (e.g. fixation, neutralization), physical treatment (e.g. separation) or biological treatment; and a waste information exchange. For ultimate disposal of hazardous wastes the Report recommends the development of one or more secure and EPA-approved landfills within the State. The Task Force concluded that the private sector is better prepared and capable of developing and operating waste treatment and disposal facilities than the State. It therefore recommends the State's role in facility development be initially limited to seeking qualified private firms that are interested in locating recycling, volume reduction and disposal facilities in North Carolina, and assisting such companies in contacting willing communities with suitable sites. Only in the event that private industry does not respond adequately will the State government acquire approved sites and own and operate them.

The Task Force strongly recommends that a Governor's Waste Management Board be created to oversee the activities of the agencies involved in waste management. The Board would promote interagency coordination, monitor the effectiveness of the combined efforts of the various agencies, and make recommendations for improving the overall management effort. More specifically, eleven functions of the Board are addressed in the Final Report and include:

(1) To facilitate the development of necessary facilities to safely manage hazardous and low-level radioactive waste;

(2) To promote process modification and encourage research and development to aid in the prevention of waste generation;

(3) To develop policy recommendations on issues such as strict liability for facility owners and operators, public involvement in facility siting issues and compensatory regulations; and

(4) To recommend whether or not a proposed treatment, storage, or disposal facility which has been blocked by local ordinances is necessary for the state as a whole.

The membership of the Board would include the Secretary or Commissioner (or a designee) from eight departments of State government, plus eleven representatives from the legislature, local governments, private industry and public interest groups appointed by the Governor, and the Executive Director of the North Carolina Board of Science and Technology.

Finally, the most controversial recommendation in the Task Force's Final Report relates to the siting of treatment, storage, and disposal facilities for both hazardous waste and low-level radioactive waste. In short, the Task Force recommends that the State have final authority to decide on facility sites. That is, all local ordinances banning or restricting the siting of a facility could be pre-empted by the State. To establish this pre-emption authority, the State Legislature would amend the Solid Waste and Radiation Protection Acts to clearly give the State this authority. The Waste Management Board would ascertain the necessity of a proposed facility. If the Board decides the facility is essential, the Governor would be authorized to pre-empt the local ordinances. Prior to exercising this authority, the Board must:

(1) Determine that the proposed site and facility meet all federal and state environmental standards;

(2) Give local citizens adequate opportunity to express their viewpoint and concerns; and

(3) Document and set forth the justification for overriding local concerns.

Several additional recommendations relate directly to this siting issue. The Task Force recommends that localities be given statutory authority to establish appropriate taxes on waste handled by treatment or disposal facilities located within their jurisdiction. Such taxes are for localities to recoup costs associated with local health and environmental monitoring, fire preparedness, emergency protection measures to ensure safe traffic patterns and transportation, and loss of real property tax revenues. Also, the Task Force recommends the establishment of local siting advisory committees in localities where waste facilities are proposed. These committees would serve as a forum for exchange of information and opinions between State regulatory agencies and the involved locality.

LOCAL RESPONSE

These last recommendations lead to the heart of the waste management problem as seen at the local level. There is a great deal of public opposition to the siting of hazardous waste and low-level radioactive waste treatment, storage and disposal facilities (TSDF) at the local level. This public opposition is a major political force in local politics as well as state politics. For example, it is widely believed that if the Task Force's Final Report to the Governor recommends amending the Solid Waste and Radiation Protection Acts to give the State pre-emption authority, the North Carolina League of Municipalities and the Association of County Commissioners will lobby against such a bill. In fact, both of these organizations intend to lobby for the enactment of a bill giving local governments veto power in all siting decisions.

Since public opposition appears to be a major problem to be overcome in the siting of TSDFs, it would be worthwhile to explore some of the reasons for such strong opposition at the local level.

A recent study conducted for EPA attempted to identify factors which have given rise to public opposition toward hazardous waste TSDFs. Probably the most important factor contributing to opposition is the national publicity given to hazardous waste in general, including specific disasters such as Love Canal. This publicity has resulted in an increased public awareness of the hazards associated with this waste. No longer are people willing to live with these hazards in their backyards. Closely related to this general opposition towards hazardous waste TSDFs is the critical scrutiny given prospective waste facility developers. If the developer of a proposed site has owned or operated a similar type of facility in an environmentally unsound manner, then the local public is unlikely to accept assurances that the proposed newer operation will be properly conducted. The manner in which local residents and elected officials are involved in the siting process can also have a profound effect on the development of opposition toward a facility.

Failure to inform local residents and officials of the development plans, or informing the public in such a way that the lack of local input is readily apparent has been a major cause of public opposition in many instances. Another factor related to opposition is the type of waste to be accepted at a proposed site. Substances such as PCBs, Kepone and radioactive waste, which are perceived by the public as extremely dangerous regardless of disposal method or safety precautions, are usually considered to increase the likelihood of public opposition. Finally, the political sophistication of the population in the vicinity of a proposed site can affect the development of organized opposition (Centaur Associates, 1979, p. 9-11).

When public opposition to a hazardous waste TSDF arises, certain legitimate issues and concerns are commonly expressed. These include aspects of site suitability, such as soil permeability and seismic stability; problems associated with site operations, such as odors and fires; the possibility of groundwater contamination; more appropriate or higher uses for the site; and provisions for long term maintenance. Transportation of hazardous waste to the facility is also a major issue, including potential hazards of waste spills and damage to highways and property caused by heavy trucks. If the wastes to be disposed of are not locally generated, the public often manifests opposition, especially if the wastes are from out of state. Residents of rural areas have expressed opposition to accepting waste generated by urban areas. The objection here is that those bearing the risks do not receive any of the benefits, such as jobs and taxes, from the industry generating the waste. Finally, issues concerning the area surrounding a proposed or operating site have led to strong opposition. These include the assertion that the area is too populated, that community image and property values will suffer, or that the aesthetics of and quality of life in the area will be adversely impacted (Centaur Associates, 1979, p. 12).

The most common means used by local residents and elected officials in opposing hazardous waste management facilities are testimony at public hearings, initiating or threatening to initiate lawsuits against the facility sponsor to have the site closed, and hiring outside experts to testify or develop a technical case against the facility. In addition, elected officials have passed resolutions against a particular facility, promulgated a local ban on acceptance of hazardous waste in general or on acceptance of a specific substance such as PCBs, and ordered a facility to close down (Centaur Associates, 1979, p. 14). To illustrate the extent of public opposition to such facilities in North Carolina, the following examples are provided.

In August 1979, one year after the PCB spills along North Carolina roads, the State attempted to purchase a 142 acre farm in Warren County for the construction of a PCB chemical landfill. This was the second attempt by the State to site such a facility in Warren County. The first attempt, in January 1979 was met by strong public opposition, as a public hearing attracted more than 650 outraged citizens. In August of 1979, however, the Council of State voted to appropriate $165,000 for the purchase of the farm. Immediately the Warren County Board of Commissioners filed a civil complaint in Warren County Superior Court to block the sale of the site. The complaint alleged the site was unsafe for PCB storage, that EPA approved the site in violation of federal regulations, and that the State did not file an environmental impact statement, required under State law, for the purchase of the site. A temporary restraining order enjoining the State from purchasing the site was granted on August 16, 1979 and a hearing was set for August 24. On August 29, the Forsythe County Superior Court lifted the court order that blocked the state from purchasing the Warren County site but issued an order temporarily prohibiting the State from preparing the site as a dump for PCBs. The injunction was to remain in effect until the trial of the action on whether the State should be prohibited from using the site as a PCB dump had been settled (Bulman, 1980, p. 30). This issue is still in litigation and the PCBs still remain along North Carolina highways.

On August 21, 1979 the Warren County Board of Commissioners passed an ordinance prohibiting the storage and disposal of PCBs within the county and made violation of the ordinance a public nuisance subject to injunctive relief. Although this was the first such local ordinance in North Carolina, there are currently six counties (Cleveland, Stokes, Surrey, Warren, Wilkes, and Yadkin) and one city (Burlington) that have ordinances prohibiting the treatment, storage, or disposal of radioactive and/or hazardous waste within the jurisdictional limits. In addition, Mecklenburg County, Kernersville, and Reidsville currently have zoning ordinances requiring special use permits for hazardous and/or radioactive waste facilities. These ordinances restrict the siting of such facilities to a very limited space and have additional requirements that must be met before a special use permit is issued. Most of these ordinances have been passed in response to a specific siting attempt like the Warren County incident discussed above.

The legal basis on which these ordinances are constructed resides in the zoning and general ordinance making powers delegated to local government by the State of North Carolina. The general zoning enabling provisions of North Carolina (G.S. 153A-340) allow the issuance of

special use permits, which give localities an additional degree of control over activities within their jurisdiction. Also, North Carolina law (G.S. 130-17(b) Supp. 1977) requires the county health board to make "such rules and regulation, not inconsistent with the law, as are necessary to protect and advance the public health."

Whether such ordinances will hold up in court is yet to be determined in North Carolina. Other state courts have found such ordinances to be pre-empted by federal and state laws. It is these ordinances that the Governor's Task Force is addressing in the recommendation that the State have the authority of pre-emption over local ordinances and zoning.

It has become very difficult to site new TSDFs, due primarily to strong public opposition. The Governor's Task Force on Waste Management attempted to deal with this issue in several of its recommendations. As stated previously the recommendation that State laws pre-empt local ordinances, that the Waste Management Board have decision-making authority with regard to the siting of facilities, and that public participation be actively sought all address this issue. The question is, are these recommendations feasible and are they enough.

Improper waste disposal management has resulted in environmental damage, public health hazards and complex court cases. Photo by Lee A. Krohn

It is not clear at this time whether or not the State legislature will amend current legislation to give the State pre-emption authority in the field of hazardous and low-level radioactive waste management. North Carolina has a long history of opposing such legislation. If the League of Municipalities and Association of County Commissioners lobby in the State legislature, it is feasible such legislation will not pass. In addition, this particular issue appeared to be of great concern to citizens at the public hearings held throughout the State. Undoubtedly, the majority of citizens are opposed to such legislation.

The concept of a Waste Management Board to coordinate the comprehensive waste management system has a great deal of appeal. However, giving this Board the decision-making authority with regard to siting facilities is somewhat questionable. First, eight board members will be from State government and all others will be appointed by the Governor. Although this would provide a wide variety of individuals on the Board, it does not necessarily include representatives from the local community where the facility has been proposed. Second, the role of public participation is not well defined but appears to be less than a decision-making role. Third, there appears to be a conflict with the Board having authority to determine how essential a particular facility is, and also promoting the development of facilities. Without direct representation on the Board by the local community affected, public opposition to such facilities will most likely develop.

One possible solution to this siting problem is the concept of an independent siting board. Michigan is the first state to adopt legislation establishing a Site Approval Board. This is a nine-member board that includes five permanent and four ad hoc positions. The permanent positions consist of one member each from three state agencies -- the Department of Public Health, the Department of Natural Resources, and the State Police -- and a chemical engineer and a geologist appointed by the Governor. The ad hoc members include two residents of the city, town or village and two of the county in which the proposed facility is to be located. The main idea behind this approach is to maximize local input into the decision-making process, without giving total permitting authority to either local or state governments (Fore, 1981).

In Michigan, applications for the development of hazardous waste management facilities are submitted to the Department of Natural Resources (DNR). This department has 120 days to review an application and then submit it to the Site Approval Board with a recommendation for approval or rejection. The Site Approval Board has 120 days to hold public hearings to

review the risks of accidents during transportation of hazardous waste; the risk of contamination of ground or surface water; the environmental impact; and the impact on the town in which the facility is located. The board then makes a final decision on the site application, having the authority to override local zoning and special permits and the DNR (Fore, 1981). The effectiveness of such an approach is not yet known, as Michigan is just beginning to use its Site Approval Board. This approach, however, is thought to be the most realistic strategy currently available and has been endorsed by the Chemical Manufacturers Association (Burns, 1980) and the National League of Cities (Shapiro, 1980).

CONCLUSION

It is apparent that North Carolina has a hazardous waste management problem that must be dealt with immediately. The current legislation establishes a regulatory framework and delegates specific authority to state agencies. However, this legislation is not comprehensive. Issues such as state pre-emption authority, local involvement in siting decisions, and strict liability have not been addressed. The Governor's Task Force has attempted to deal with the many issues relating to hazardous and low-level radioactive waste in the context of a long-term management strategy. The emphasis the Task Force has placed on prevention, waste reduction and recycling is extremely important in this long-term context. In order for the hazardous waste management program to work effectively in the short-run, however, an adequate number of treatment, storage and disposal facilities will be needed.

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M. Shea Hollifield

Cash, Condos, and Crisis: What about North Carolina?

The conversion of rental housing units to single ownership or condominiums has become an increasingly significant component of the American housing market. Between 1970 and 1979, 346,476 rental units were converted to condominiums, and the Department of Housing and Urban Development (HUD) projects that an additional 1.1 million units will be converted between 1979 and 1985 (HUD, 1980, pp. IV-6, ii). A great deal of controversy and speculation has been generated regarding the effect these conversions will have on the housing market.

The Southeast, with the exception of resort areas in Florida, has not experienced the same rate of conversions that other sections of the country have. Continued growth and industrialization, accompanied by the continual high cost of new construction, indicate that Southern states can expect to see increased conversion activity in the 1980s. Instead of responding to conversions reactively, North Carolina state and local governments need to take steps to limit the negative impacts that other regions have experienced. A study of national conversion trends, consideration of local situations and needs and analyses of existing and proposed state legislation would enable North Carolina to formulate a framework that is suitable to address conversions both today and in five years.

NATIONAL TRENDS

A combination of circumstances leads to the conversion of rental units to condominiums, including growing numbers of small households, increasing housing costs for all types of housing, the federal tax structure and the limited return on rental property that is perceived by investors.

MORE AND SMALLER HOUSEHOLDS

More conversions are occurring in metropolitan areas where there are growing numbers of households, a large percentage of which have only one or two persons. Approximately 50% of all condominium purchasers are two-person households (*U.S. News and World Report*, November 13, 1978). Very little market demand for condominiums is created by households of four or more people. Many of the households buying condominiums are single people or couples beginning to invest in housing, and converted units are seen as an affordable mechanism for home purchase. Households that cannot afford, or do not desire, the responsibility of a single-family unit are buying converted units instead of renting. Rather than redirecting potential single-family unit sales, condominium buyers may be moving toward such a purchase in the future by building equity in a condominium.

COST

Condominiums are less costly than single-family units, and ones which have been converted are less expensive than new ones. In addition, tax deductions on mortgage interest and property taxes for unit-owners can represent a significant savings. Upon resale, if the gain from the sale is reinvested in another primary residence within eighteen months that gain is not taxable. Condominiums are appreciating at 14% to 15% annually compared to 12% appreciation on single-family houses (*TIME*, March 5, 1979). This rapid appreciation creates a situation in which condominiums represent a good housing investment for people who might not be able to own in other circumstances. It is still the case, however, that there are segments of the population that simply cannot afford a home, regardless of the attractive appreciation rates and the additional tax deductions offered to homeowners.

Even though converted units tend to be less expensive than new condominiums or single-family houses, these lower prices may well be due to the fact that they are smaller in terms of square feet of living space and number of bedrooms. Converted units usually have 8% to 16% less square feet of living area than new condominiums (Metropolitan Washington COG, 1976, p. 55). It would appear, then, that in terms of the quantity

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Condominiums are sometimes bought by investors and remain in the rental stock. Rents go up.
Photo by John Gaadt

of space being purchased, converted units are not necessarily a better buy than other forms of housing.

TAX ADVANTAGES IN CONVERSIONS

When rental units are converted to condominiums the process is usually performed by a professional conversion developer rather than by the original owner. Direct owner-conversions are atypical, as they would not be able to apply capital gains provisions to the profit if they converted directly. By selling the entire building to a converter, the profit will be treated as capital gains rather than ordinary income, resulting in a significant tax benefit to the original owner.

The converter is willing to buy a potential condominium building at a higher sales price than a rental building because profits from the sales of individual units are high and generated fairly quickly. These higher sales prices and capital gains benefits make it very attractive for rental owners to sell after the depreciation value of a building has been extracted.

In January 1979, taxes on real estate investment changed from taxing 50% of gain at ordinary rates to 40% at these rates. This creates an even stronger incentive for the owners of rental property to sell to converters. Rather than recognizing and addressing the adverse effects the federal tax structure has on rental stock and conversion activity, the federal government has instead acted to intensify these impacts.

FINANCIAL RETURN ON RENTAL PROPERTIES

Escalating development costs have contributed to the growth of the condominium market. Many developers feel that rent levels have not kept pace with rising costs. While operating costs have increased, it is not always possible to pass these increases on to tenants. Renters' incomes have not kept pace with the rest of the economy, and usually cannot sustain the rents necessary to maintain operating costs. Between 1970 and 1976, median rent rose by 55% while median income for renters rose by 29% (Urban Consortium 1979, p. 9). It would be difficult for many population groups -- the elderly and low- and moderate-income households -- to pay substantial rent increases. This also means that they most likely cannot afford to buy a converted unit.

Income, depreciation allowances, property appreciation and tax sheltering on rental property may not keep pace with inflation and match the return from sale to a converter, but interest costs on mortgages, which make up one-half to one-third of landlords' total costs, are fixed and, therefore, not tied to subsequent inflation.

LOCAL CIRCUMSTANCES

Certain local markets have experienced a great deal of conversion activity while others have had none. These high conversion areas share several characteristics listed in Figure 1. Localities experiencing these characteristics should expect conversions and analyze their local rental markets to ascertain what effect conversions might have.

CONVERSION STIMULI

1. Scarce land for new development
2. High prices for available land
3. High prices for single-family units
4. Supply of good-quality rental stock
5. No conversion regulation legislation
6. Low rental vacancies

Figure 1

(Daniel Lauber, *Planning*, September 1977)

The rental market is extremely complex. Vacancies are declining, making it very difficult to find rental housing; utility costs and overall inflation factors are causing operating costs to rise; and there is very little new rental construction. At the same time, rents are not rising as quickly as other cost-of-living components. Whether this is because the market either will not or cannot respond, is unclear. If it cannot respond, because of the low incomes

of renters, then conversion will only exacerbate an already difficult situation.

WHO IS AFFECTED BY CONVERSIONS

There are two groups of people who are directly affected by condominium conversions: those who buy and those who are displaced.

CONVERTED UNIT BUYERS	
Annual income less than $30,000	39%
Managerial or professional jobs	66%
Single-person household	57%
Black	10%
Hispanic	2%
35 years of age or less	50%
Over 55 years of age	20%
Over 65 years of age	9%

Figure 2

(Department of Housing and Urban Development, 1980)

People who buy converted units tend to be young and white, with relatively high incomes from professional and managerial jobs, and with small households. Single persons and blacks typically represent greater proportions of converted-unit owners than of single-family unit owners, and it would appear that for these groups, conversions open up ownership opportunities that previously did not exist. Elderly and low-income households represent a smaller proportion of condominium owners than of single-family homeowners, and for these groups, conversion does not enhance their ownership options. It may, in fact, intensify their housing difficulties through displacement and increased rents as a result of fewer rental vacancies.

People who are tenants prior to conversion represent another affected group and usually have lower incomes than tenant-buyers. Twenty percent of those displaced are over sixty-five. Twelve percent are elderly and have annual incomes of under $12,500. Eleven percent are black and 1% are Hispanic (HUD, 1980, p. vi).

It appears that those benefitting from conversions are relatively young, white, middle-income people, and those who suffer from conversions are more likely to be older and poorer. Conversion policy needs to account for both these groups' relative needs.

THE IMPACTS OF CONDOMINIUM CONVERSION

Condominium conversions can have an impact on a variety of community concerns. Local tax bases, neighborhood stability, displacement, the supply of rental housing and its cost are areas that are influenced by the growing rate of conversion.

It is possible that the reassessment of property after conversion can lead to greater revenues from local property taxes depending on how local jurisdictions assess property. If owner-occupied property is assessed at a lower rate than income-producing rental property, the higher value of the individual owner-occupied property will not have a significant effect. When considering total property tax revenues in relation to conversions to date, the ramifications have been small (HUD, 1980, p. vii).

Originally it was thought that conversions would help stabilize and revitalize neighborhoods. Conversions that have occurred so far have been in already-stable areas. They appear to result from, rather than generate, revitalization and stability (HUD, 1980, p. vii).

Conversions occur in order to provide housing for the middle-income and a quick, high rate of return for developers. Stabilizing neighborhoods and providing improved housing are risky ventures. They do not provide safe investment opportunities and therefore conversions have not been an integral part of the gentrification process. Conversions do little in the way of creating additional local revenues through property taxes and do not significantly improve the nature of the neighborhoods in which they take place.

Displacement caused by condominium conversions is perhaps the most hotly disputed side-effect of the conversion process. The Department of Housing and Urban Development estimates that in buildings converted after January 1977, 58% of the resident households moved by January 1980; but it classifies only 10% of the residents who live in converted buildings as displaced. This is based on a definition of displacement as a move to rental housing of similar or lower quality at a higher price or of lower quality at an equivalent cost. Displacement can be viewed, however, as any involuntary move. If that perspective is used, then a larger proportion of the 58% of households that moved after conversion could be considered displaced. Estimates made in the U.S. Senate hearings of 1979 cite average displacement following conversions at 75%.

The extent of displacement is still unclear despite the controversy around it. Differences in definition and the difficulty in contacting tenants who have moved contribute to the problem.

It appears that some converters take steps to minimize apparent displacement by raising rents prior to conversion so that many tenants are forced to move. This tactic reduces the apparent displacement rate, although the effect is the same. Tenants forced out in this manner will not be able to benefit from any displacement or relocation allowances that certain localities may require.

The extent of displacement may be disputed, but it is clear that the elderly and low- and moderate-income families are the ones who suffer most. Low vacancy rates, limited incomes, and the difficulties experienced in readjustment make these segments of the population vulnerable to the adverse consequences of displacement and relocation. These people bear the burden of conversion's negative effects and can least afford to.

While rental units are being removed from the market, it is assumed that unit-buyers will be drawn partially from former renters, thereby reducing the rental market demand. The net decrease in the rental market when accounting for this reduced rental demand, assuming that some condominiums are bought by investors and remain rental, is five units from the rental stock for every 100 converted units. It is also true, however, that the reduction of rental units by conversion accounted for 17% of the excess rental demand over supply in 1977 (HUD, 1980, pp. iii-iv). Even relatively small reductions can have a critical effect on local markets with very low rental vacancies.

As long as little new rental housing is being added and the vacancy rates remain low, conversions harm the rental market. In the first quarter of 1979 the national rental vacancy rate was 4.8% (U.S. Senate hearings, 1979, p. 40), which does not allow a great deal of choice or fluidity in the rental market. Conversions, even when not affecting large numbers of units, can be devastating in such a situation.

Condominium conversions can influence housing costs in three ways. First, tenant buyers in converted buildings will pay more for housing. The monthly costs of purchasing a unit, which include debt service, insurance and property taxes, are usually 30-50% higher than rent for the same space (U.S. Senate hearings, 1979, p. 260). Tax deductions for property taxes and interest payments may help mitigate these increased costs.

Some converted units are bought by investors and remain in the rental market. This process is beneficial in that it does not reduce the rental stock or the already-low vacancy rate. These investors, however, must cover the same increased costs that any other unit-purchaser must. Rents on investor-owned units are usually substantially higher than rents on units in rental buildings. Once units are investor-owned, rents are, on the average, 75% higher than pre-conversion rents (Lauber, 1980, p. 205). Increases of this magnitude often contribute to the displacement of low- and moderate-income households which simply cannot afford this increase in housing expenditure.

Converters want tenants to vacate quickly so that they can get rapid sales turnover.
Photo by John Gaadt

Finally, conversion can influence housing cost through secondary market impacts. As units are removed from the rental stock and vacancy rates remain low, competition for the remaining units forces rent levels up. The middle-income households who may not choose to buy their units when conversions occur compete with low- and moderate-income households for a decreasing number of rental units. There is a strong demand and because the middle-income households can pay more, landlords can raise rents beyond previous levels and still fill their units. This impact on housing costs is perhaps more critical than the others as it can affect people who are not directly involved in conversions. Its repercussions can be felt all through the rental market. The combination of increasing rents and decreasing vacancies that can result from the conversion process influences people who are not able to mitigate these impacts and are unable to benefit from the advantages of increased homeownership that conversions provide.

CONVERSIONS IN NORTH CAROLINA

EXISTING AND PROPOSED LEGISLATION

The right to sell condominiums is provided for in the North Carolina Unit Ownership Act. This provision allows for condominium units to be bought and sold, but does not address tenants' rights, consumer protection or impacts on local housing markets. In order for local jurisdictions to be able to mitigate the effects of conversions, it is necessary to have enabling legislation on the state level. It is unclear whether the North Carolina Unit Ownership Act permits such local intervention. The Act states that planning and zoning commissions may enact supplemental laws governing condominium projects. Some legal experts believe that this provision grants municipalities the authority to adopt conversion regulations as long as they are not expressly inconsistent with other sections of existing state condominium law (Rhyne, Rhyne and Asch, 1975, p. 21). There is debate over this provision and municipalities have been reluctant to test the extent of authority provided for in the Act.

The ambiguity of the existing North Carolina condominium legislation will be resolved when new legislation is adopted. The state has appointed a Condominium Statutes Drafting Committee to develop new enabling legislation for condominium ownership. The committee's proposals are drafts that will be reviewed and presented to the General Statutes Commission, possibly in the spring or summer of 1981. The Attorney General's office hopes to introduce the legislation to the state legislature in 1981, but action may not be taken until the 1982 session.[1]

Condominium conversions are only one aspect of condominium law and to date the committee has released two drafts on the subject. The first provides for moratoria on conversions by municipal ordinance, which may be enacted when city or county governing bodies ascertain that conversions would cause critical financial and relocation problems for existing tenants, and reduce the supply of rental housing available to elderly and low- and middle-income households. Such a moratorium has a six-month time limit, but may be readopted for an indefinite number of additional six-month periods. If a specific conversion is approved by two-thirds of the tenants or found not to result in the situations described above, a governing body may allow the conversion. The draft on moratoria explicitly states that this provision is to be the exclusive procedure for prohibiting conversions.

This proposed intervention is only a temporary response to conversions. Should conversion activity cause either severe problems for tenants or a reduction in rental stock for the elderly and low- and middle-income populations, a more comprehensive and finely-tuned response would be called for. Moratoria are temporary measures to provide localities with the time to formulate an appropriate long-range response to conversion. It is questionable whether repeated moratoria, without any effort to address the conversion problem itself, would withstand court challenge.

In order to provide an equitable response to conversion, municipalities must seek ways to regulate and limit conversion activity when the rental market is inadequate to meet demand, yet allow conversions when clearly-stated standards pertaining to local market conditions are met. A balanced approach is not provided for under the draft legislation.

"NORTH CAROLINA HAS THE OPPORTUNITY TO BENEFIT FROM NATIONAL EXPERIENCE IN THE AREA OF CONVERSION."

The second draft released by the committee deals with provisions for tenants in buildings that are being converted. The draft gives tenants the exclusive right to purchase their units up to forty-five days after the required notice of conversion is received; puts some restrictions on when the unit can be shown to non-tenant buyers; and states that tenants will not be required to vacate until the expiration of their leases or before seventy-five days after notice of conversion, whichever is later. Tenants may also terminate leases with thirty days' notice and no penalty. In addition, tenant-buyers must receive the following information within the last fifteen days of the period in which they have first-purchase rights:

1. articles of incorporation, bylaws, declaration of condominium and purchase agreement;

2. a statement of all improvements to be made and an estimated completion schedule;

3. a financial analysis that includes a proposed budget for the homeowners association, showing maintenance operation estimates and either a statement of capital reserves expenditures or a statement that there will be no such reserve; and

4. a copy of the warranty or a statement that no warranty will be given.

These provisions give tenants protections that were previously unavailable on a widespread basis in North Carolina. Some localities requested limited tenant protections, but the legal basis for these varied from city to city, and in some cases was non-existent. The forty-five day period during which tenants have exclusive right to buy their units is useful, but somewhat shorter than provisions made by

other states. The period for exclusive purchase-rights ranges from thirty to 120 days, though sixty and ninety days are the most frequently used (HUD, 1980, Appendix 2-X). The tenants' rights to terminate leases with notice at no penalty included in this draft is particularly helpful. The draft also specifies that no rent increases may occur after the notice to convert is given.

The information that must be given to tenant-buyers represents an improvement over the existing situation of no mandatory disclosures, but additional items would also be helpful to prospective buyers. A building code inspection report citing any violations, a property report disclosing the age and condition of the building and its components, and the right to rescind the contract within specified limits would enable prospective buyers to make more knowledgeable decisions.

The drafts relating to conversions that have been released by the Condominium Statutes Drafting Committee represent an improvement over the existing enabling legislation. The primary weakness of the draft legislation is its failure to allow for adequate and appropriate local response to conversions. The proposals made reflect concern about conversion impacts, but it is necessary to formulate legislation that will not only meet the demands of conversion circumstances today, but allow localities to address their changing situations within the next several years. National trends have demonstrated that as conversions increase, their negative consequences intensify. Southern states, with current patterns of growth and expansion, should expect to see rising conversion rates. By adopting legislation that allows localities more discretion in dealing with conversion, North Carolina will reduce the likelihood that the proposed legislation will be outdated in the near future. A more far-sighted legislative provision would also allow localities to work with conversion activity on an ongoing basis rather than resorting to emergency measures that are inadequate for continued use.

SEVEN NORTH CAROLINA CITIES

Conversions in seven cities in Piedmont North Carolina were reviewed. These are: Chapel Hill, Charlotte, Durham, High Point, Greensboro, Raleigh and Winston-Salem. The information available reflects a range of activity and governmental involvement in conversions.

Chapel Hill has had one conversion of 124 units in January 1981. Another attempted conversion is presently involved in court action. A rental vacancy rate is not currently available, but it is considered to be significantly less than 4%. The town also has a high transient population due to the University of North Carolina. The Town Council has expressed concern about conversions and in February 1981 an information report on condominium conversions was submitted to the Council.

Charlotte has had 604 units converted to condominiums since 1980. Between 1971 and 1979 3,747 units were converted. Charlotte does not have a shortage of rental housing now, but one is anticipated by the spring of 1982. The City Council requested information on conversions a year ago but the prevailing attitude is that conversions are not yet a problem.

Repairs on condominiums are often only of an exterior, cosmetic nature. Photo by John Gaadt

Six units have been converted in Durham. Several conversions were attempted in 1973, but failed because of market conditions. These failures apparently dampened conversion activity in Durham. Presently conversions must be approved through the subdivision regulations. At this point no study or action pertaining to conversions has taken place in Durham.

No conversions have taken place in High Point. A study is planned to determine the likelihood and possible impacts of conversions in that city.

Greensboro has had approximately 352 units converted to condominiums within the past two years. Any apartment building can be converted if it meets local fire and building codes and state codes. No study of conversion and its possible effects has been done, nor is one planned.

Approximately 200 units have been converted in the city of Raleigh. A condominium conversion study was done in November of 1980 and recommendations were made to the City Council. No action has been taken. Since conversions have tapered off, perhaps due to market conditions, no Council response is likely until conversions again become an active concern.

Two hundred-forty-six units in Winston-Salem were converted to condominiums as of September 1980. The rental vacancy rate there is about 4%. A condominium conversion study for Winston-Salem and Forsyth County was put out in October 1980, but no recommendations were made to the Board of Aldermen. The study reflects the desire to wait for the work of the Condominium Statutes Drafting Committee before recommendations and possible action are advocated.

CONCLUSION

This overview of conversions in seven North Carolina cities shows a variety of local situations. Differing degrees of conversion activity are taking place in North Carolina cities and concern varies. It is clear, however, that the diversity of local experiences calls for a range of possible responses to meet local needs. Municipalities should be able to address conversion concerns in an appropriate manner. While conversion is moderate in North Carolina, anticipated rental shortages, limited new rental unit construction and a growing demand for housing all point to increased future activity.

In order to prevent the problems that other areas of the country have experienced, North Carolina must take steps to ensure that adequate responses to conversion-associated problems are possible before local situations become critical. North Carolina has the opportunity to benefit from national experience in the area of conversion legislation. By creating a legislative framework that encompasses present and future needs, the state can increase legislative effectiveness and provide preventive measures to a potential problem.

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Adult Entertainment Zoning: A Case Study

In a decade when much of government's time and resources have been consumed in the fight against crime, thought about society's views on victimless crimes has been considerable. When citizens are being victimized by violent crimes and when resources are stretched thin, officials are forced to examine the priorities of the criminal justice system. Few would dispute that efforts to ensure the safety of citizens in the streets and their homes should prevail over attempts to keep a consenting adult from viewing obscene material. Yet society, in its fickle and complicated way, creates a paradox for government officials. Protection against both the real physical threat of violence and property crimes and the tenuous spiritual threat of immorality are called for. Resources are probably not great enough, however, to meet either threat, much less both of them. "Interviews with law enforcement officers and public prosecutors across the country...consistently revealed a view that fiscal and political constraints barred an aggressive drive against pornography, which would necessarily be perceived to be at the expense of other, more urgent law enforcement priorities" (Strum, 1977, p. 13). How then, other than to continue to expend already stretched resources, can government control victimless crimes?

One area that is currently receiving attention is the use of zoning as an alternative to control the proliferation of the adult entertainment business, which includes adult book stores, adult motion picture theaters, massage parlors, and adult cabarets. In examining the potential of zoning to control those activities, much attention will be directed to the experience of Fayetteville, North Carolina.

FAYETTEVILLE AND ADULT ENTERTAINMENT

Fayetteville lies in the coastal plains of southeastern North Carolina. It is a commercial center for the southeastern part of the state as well as bordering areas of South Carolina. Its neighbors to the west are Fort Bragg and Pope Air Force Base. The heavily-traveled north-south route of Interstate 95 passes along its eastern limits. As the largest city in the area, with an extensive military complex, and a busy interstate corridor, the city has attracted considerable attention as a bustling market for various services and commodities, including adult entertainment and its accompanying conditions.

Most of the sex trade is located in the 500 block of Hay Street in the downtown business district. Other such establishments, though not in such heavy concentration, are found along Bragg Boulevard and Fort Bragg Road, two of the main arteries to the military complex. There are other sex businesses scattered on individual sites around the city as well. The "500 block," though, is the area that has drawn the attention of people from within and outside of the community.

Fayetteville's sex trade is well known. John Swope, executive secretary of the Fayetteville Chamber of Commerce told the City Council on March 12, 1979 that the Prince Charles Hotel on Hay Street was "probably the larges whorehouse east of the Mississippi, in the nation, and probably in the world" (*The Fayetteville Observer*, March 13, 1979, p. 2A).[1] On Tuesday, March 13, 1979, Senator Charles Vickery of Orange County, following a Senate Judiciary Committee hearing of the North Carolina General Assembly on the subject of prostitution, told a *Fayetteville Observer* reporter, " 'the situation in Fayetteville is a laughing stock across the State, known as a prostitute's paradise' " (*The Fayetteville Observer*, March 16, 1979, p. 3A).

Fayetteville, like many other cities in similar situations, has had to ask itself why it should try to control its adult entertainment community, which some elements of its population enjoy. The Commission on Obscenity and Pornography, in its 1970 report, aptly stated one of the most common reasons. "The Commission has taken cognizance of the concern of many

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Possible interventions to proliferating adult entertainment businesses have sparked concern and controversy. Photo by L.C. Barbour

people of a deleterious effect upon the individual morality of American citizens and upon the moral climate in America as a whole. This concern appears to flow from a belief that exposure to explicit materials may cause moral confusion which, in turn, may induce antisocial or criminal behavior " (Radzinowicz and Wolfgang, 1977, p. 503).

Not only is there concern with the deleterious effects upon morality, but with the deleterious effects upon the surrounding neighborhood as well. Detroit made one of the earliest efforts to use zoning to control adult entertainment businesses, and its success in the resultant legal battles rested on its ability to demonstrate deleterious effects on the neighborhood.

> Here, local planners zeroed in on the relationship between a series of uses that appeared to have or create a 'skid-row effect' on adjoining properties. Planners noted that concentrations of certain uses, including pornographic ones, often resulted in deteriorating property values, higher crime rates, traffic congestion, and depressed neighborhood conditions. They used this information in preparing their now-famous anti-skid-row ordinance, which contained definitions of pornographic uses (Toner, 1977, p. 2).

A third concern, especially for law enforcers, is the rise in criminal activity that seems to surround the adult entertainment business. Be it the entertainment itself or the nature of the people partaking of it, crime statistics in Fayetteville starkly reveal this effect. In 1978, Fayetteville's overall crime rate decreased by 11%. In the same period crime in the district encompassing Hay Street increased by 7 1/2% (*The Fayetteville Observer*, January 25, 1979, p. 50). In figures reported on June 20, 1979, the crime rate had continued to drop at a 15% rate while increasing in the downtown district by 16%. Of the ten reporting zones, the downtown district accounted for almost 12% of the city's Part I crime (*The Fayetteville Observer*, June 20, 1979, p. 1B).

"HOW THEN, OTHER THAN TO CONTINUE TO EXPEND ALREADY STRETCHED RESOURCES, CAN GOVERNMENT CONTROL VICTIMLESS CRIMES?"

A fourth reason for concern is the growing evidence that the adult entertainment business is controlled by organized crime. "Organized crime...dominates the traditional porn industry, as well as massage parlors, topless bars and strip joints. Now it is a growing presence in porn films as well. Fearful of prosecution for interstate activities, many independent producers turned the risky business of distribution over to the Mafia " (*TIME*, 1976). Local government is concerned about organized crime's involvement with the industry, but what creates real fear is the increasing potential for corruption that accompanies it.

A final reason for concern, and in Fayetteville's case a critical one, is the city's reputation, for this type of enterprise may prevent further development. In early 1979, Wilson Yarborough, past president of the Fayetteville Area Chamber of Commerce, told a local citizens' group that the Hay Street area was affecting economic growth.

> Aside from moral concerns and the woes of high crime rates, Yarborough said the topless district will probably affect the decision of a $35 million industry that is considering Fayetteville as a site for plant location. 'There is no way to put a price tag on the economic impact of the downtown district,' said Yarborough. 'But if it has already or might in the future cost the city an industry, will it have an economic domino effect?' Yarborough said

representatives of the industry that was considering Fayetteville had expressed concern about the 'open prostitution' downtown after a 'windshield tour' of the city (*The Fayetteville Observer*, January 10, 1979, p. 2B).

Each of these concerns: community exposure to immorality, physical deterioration, an increased crime rate, the influx of organized crime, and a possible barrier to development due to reputation, offer some degree of justification for efforts at control.

For a long time Fayetteville's control efforts were traditional, revolving around activities of law enforcement. The Intelligence Division, formerly the Special Operations Division, of the Fayetteville Police Department conducted numerous vigorous campaigns against the sex businesses. One avenue of attack was directed at prostitution. Surveillance, undercover officers, and the use of off-duty military personnel and civilians as willing agents were all successfully used.[2] But they were successful only in the sense that arrests were made. Police Chief Danny Dixon has complained often that resulting action in court did not match the efforts of his department, making the whole process futile. "To give you the picture of what we're facing, we arrested fourteen prostitutes on Friday night and all but one were back on the streets before we finished the paperwork," Dixon said. "We're going to arrest and arrest and arrest and they're (the courts) going to turn them out and we're going to arrest again" (*The Fayetteville Observer*, February 14, 1979, p. 2A). On March 13, Dixon appeared before a legislative hearing on tougher sentencing provisions for prostitution. He testified that there were between 200 and 250 known prostitutes working in Fayetteville at that time. He stated that increased mandatory sentencing would reduce that number (*The Fayetteville Observer*, March 16, 1979, p. 12A). It was following this hearing that Senator Vickery made the remark mentioned earlier. Vicker's response to Dixon's testimony was that judges should get tougher on their own, not create new laws.

Police efforts were also directed for a while at the merchandise of adult businesses. Numerous adult bookstores were padlocked when pornographic material was found until restraining orders were issued. With this measure taken away, highly technical standards of weights and measures regulations were invoked concerning the size and labeling of adult films that provided for the seizure of violative items and businesses. The conditions were easily corrected, however, and, the standards being met, business went on as usual. When local officers and state Alcohol Law Enforcement agents had licenses revoked in topless bars because of liquor law violations, "new" businesses with a different name and "management" were operating on the same premises within days. A task force approach was used on occasion, with State and Federal activity aimed to a great extent at the interstate aspect of the sex business (Heintzelman, 1979). Although tactically effective, law enforcement efforts were, in the long run, only a stalling mechanism of harassment rather than elimination of the problem.

"A FINAL REASON FOR CONCERN, AND IN FAYETTEVILLE'S CASE A CRITICAL ONE, IS THE CITY'S REPUTATION ..."

Realizing the futility of the law enforcement efforts, the Fayetteville City Council, in early 1977 requested the Cumberland County Joint Planning Board to propose zoning measures to address the problem. There were two basic models from which to choose: Detroit and Boston. Detroit had chosen the strategy of dispersing its adult entertainment to prevent clustering and its consequences. Boston, on the other hand, chose to contain these businesses in selected areas to prevent their spread throughout the city. It is useful to briefly examine both of these cities' zoning measures before returning to Fayetteville's efforts.

DETROIT'S ADULT ENTERTAINMENT ZONING

Detroit's original skid-row zoning regulation was formulated in 1962. At that time it was directed at bars, pawnshops, pool halls, public lodging houses, etc. As mentioned earlier, planners had discovered that certain uses accelerated certain deleterious effects. In the late '60s and early '70s attention was given to sex businesses, and the city added these uses to its ordinance in 1972. William Toner termed the Detroit strategy "divide and regulate." He explained in a 1977 ASPO Report:

> Detroit city officials didn't set out to regulate pornographic uses. They were trying mainly to prevent the development of more skid rows. They had two objectives: first, to keep typical skid-row uses separate from one another, and, second, to keep these same uses separate from residential areas. These added up to one major policy of dispersing skid-row uses and spreading them throughout the commercial and industrial areas of the city (Toner, 1977, p. 3).

The first objective was met by not allowing a listed use within 1,000 feet of two other like uses. The second objective was met by another distance limitation: that no listed use be located within 500 feet of a residential unit. This latter provision was found unconstitutional by a federal district court and was amended to change "residential dwelling unit" to "residentially zoned district."

Listed in the ordinance along with the earlier skid-row establishments were four sex businesses, adult book stores, adult motion picture theaters, adult mini-motion picture theaters, and group "D" cabarets.

Adult book stores were defined as having a "substantial or significant portion" of their literary contents "distinguished or characterized by their emphasis on matter depicting, describing, or relating to 'Specified Sexual Activities' or 'Specified Anatomical Areas...'" (Official Zoning Ordinance of the City of Detroit Sec. 32.0007).

The two types of motion picture theaters were similarly defined by this phrase as describing "material distinguished or characterized by an emphasis on matter depicting, describing, or relating to 'Specified Sexual Activities' or 'Specified Anatomical Areas...'" The differences between an adult motion picture theater and an adult mini-motion picture theater was that the latter was limited in its capacity to "less than 50 persons." 'Specified Sexual Activities' and 'Specified Anatomical Areas' were graphically defined further on in the same section of the ordinance (Detroit Zoning Ordinance Sec. 32.0007).

"FACED WITH AN AREA ALREADY CONSUMED BY THE SEX BUSINESS, BOSTON SOUGHT TO PREVENT ITS FURTHER SPREAD."

A Group "D" cabaret was defined as one "which features topless dancers, go-go dancers, exotic dancers, strippers, male or female impersonators, or similar entertainers " (Detroit Zoning Ordinance Sec. 32.0023).

Detroit's ordinance was challenged in the courts and was ruled constitutional by the Supreme Court in 1976.

BOSTON'S ADULT ENTERTAINMENT ZONING

Boston, unlike Detroit, chose both a different location strategy and a different definitional determination in its zoning ordinance. Faced with an area already consumed by the sex business, Boston sought to prevent its further spread. Toner describes the Boston locational strategy in the following way:

> The adult entertainment district - the Combat Zone - is really a special overlay district that applies to only seven acres of the city. The overlay zone has two main purposes: 1) to concentrate similar adult entertainment uses into a single small area; and 2) to prevent the spread of these uses to other parts of the city, especially to residential areas. Not only did the Boston Redevelopment Authority (BRA) create a special zoning category for book stores, peep shows, X-rated movie houses and strip joints, they also threw in a bundle of renewal dollars to make the whole thing work (Toner, 1977, p. 7).

Toner goes on to talk of the BRA's design.

> To fight against the skid-row effect, Boston embarked on a renovation program to upgrade the district. With a few new parks, new street lighting, sign removal, improved streets, and renovated store fronts, they hoped to make the Combat Zone more like the celebrated entertainment districts of London, San Francisco, and Copenhagen (Toner, 1977, p. 2).

Whereas Detroit defined its adult uses according to the content of the literature, movies, and entertainment, Boston's ordinance was markedly different. Boston relied on an age classification. Relying on ordinances and licensing requirements that already prevented minors from patronizing certain businesses,

The 500 block of Hay Street in Fayetteville, N.C. contains a concentration of sex businesses. Photo by L.C. Barbour

Boston merely added the phrase "customarily not open to the public generally but only to one or more classes of the public excluding any minor by reason of age" to the listed uses in the new zone. Boston, then, stressed "adult" in controlling its sex businesses (Boston Zoning Code Sec. 8-7).

From a planning viewpoint, Toner seems to prefer Boston's approach. He comments:

> The single outstanding quality of the Boston approach is that it legitimized what already existed. The reality was that the Combat Zone had a high concentration of adult entertainment uses long before the city considered any police power action. Instead of trying to chase them off to another location -- or worse, to pretend that they did not exist -- the city adopted special land-use regulations to control what existed (Toner, 1977, p.8).

"THE SECOND ISSUE WAS WHETHER THE ORDINANCE WAS A PRIOR RESTRAINT ON CONSTITUTIONALLY PROTECTED MATERIAL."

He also lists six additional advantages to the Boston approach:

1) "like uses are treated alike,"

2) "lower administrative costs,"

3) "control over both the total growth of pornographic uses and the development of specific new uses,"

4) "no definitional vagueness,"

5) "apparent constitutionality," and

6) "easier evaluation of total public service impact of pornographic uses" (Toner, 1977, p.8).

SUPREME COURT REVIEW OF THE DETROIT MODEL

The American Society of Planning Officials (ASPO) surveyed zoning approaches in several cities and found that most copied the Detroit ordinance. It was theorized that this resulted from the Supreme Court ruling that the Detroit ordinance was constitutional (Toner, 1977, p. 9). Detroit's ordinance was challenged in 1974 by the owners of two adult motion picture theaters. The Federal District Court found the 1,000-foot provision unconstitutional. The latter was amended and was not challenged again. On appeal by the plaintiffs, the U.S. Court of Appeals for the Sixth Circuit overturned the ordinance on the basis that a prior restraint was imposed on "constitutionally protected communication and thus could not be justified merely by establishing that they were designed to serve a compelling state interest" (*Young v. American Mini Theatres, Inc.*, 49L. Ed. 2d 310 (1976)). Detroit then took the case to the Supreme Court, which reached its decision on June 24, 1976.

The Court addressed three broad issues. The first issue was the contention that the ordinance was too vague to enable a determination of whether the material could be "characterized by an emphasis" on matter defined as 'specified sexual activities or anatomical areas.' The Court answered the vagueness claim by saying:

> The only vagueness in the ordinances relates to the amount of sexually explicit activity that may be portrayed before the material can be said to be 'characterized by an emphasis' on such matter. For most films the question will be readily answerable; to the extent that an area of doubt exists, we see no reason why the ordinances are not 'readily subject to a narrowing construction by the state courts' ...since the limited amount of uncertainty in the ordinance is easily susceptible of a a narrowing construction, we think this is an inappropriate case in which to adjudicate the hypothetical claims of persons not before the Court (*Young v. American Mini Theatres, Inc.* at 320).

The second issue was whether the ordinance was a prior restraint on constitutionally protected material. The Court replied: "The ordinances are not challenged on the ground that they impose a limit on the total number of adult theaters which may operate in the city of Detroit. There is no claim that distributors or exhibitors of adult films are denied access to the market or, conversely, that the viewing public is unable to satisfy its appetite for sexually explicit fare. Viewed as an entity, the market for this commodity is essentially unrestrained" (*Young v. American Mini Theatres, Inc.* at 321). The Court went on to say:

> The city's general zoning laws require all motion picture theaters to satisfy certain locational as well as other requiremants; we have no doubt that the municipality may control the location of theaters as well as the location of other commercial establishments either by confining them to certain specified commercial zones or by requiring that they be dispersed throughout the city. The mere fact that the commercial exploitation of material protected by the First Amendment is subject to zoning and other licensing requirements is not a sufficient reason for invalidating these ordinances (*Young v. American Mini Theatres, Inc.* at 321).

The final issue of contention was that the classification of the theaters on their content violated the Equal Protection clause of the Fourteenth Amendment. The Court reviewed its history in showing that the nature of content of speech and material had been a basis for various kinds of governmental sanctions in the past. The Court reported:

> Even though we recognize that the First Amendment will not tolerate the total suppression of erotic materials that have some arguably artistic value, it is manifest that society's interest in protecting this type of expression is of a wholly different, and lesser, magnitude than the interest in untrammeled political debate... Even though the First Amendment protects communication in this area from total subression, we hold that the State may legitimately use the content of these materials as the basis for placing them in a different classification from other motion pictures (*Young v. American Mini Theatres, Inc.* at 326).

"IT IS IMPORTANT TO NOTE THAT THE COURT EMPHASIZED THAT DETROIT HAD REASONABLY JUSTIFIED THE ZONING ORDINANCE."

It is important to note that the Court emphasized that Detroit had reasonable justified the zoning ordinances. Early in its decision the Court said: "In the opinion of urban planners and real estate experts who supported the ordinances, the location of several such businesses in the same neighborhood tends to attract an undesirable quantity and quality of transients, adversely affects property values, causes an increase in crime, especially prostitution, and encourages residents and businesses to move elsewhere" (*Young v. American Mini Theatres, Inc.* at 317). It closed its decision by saying almost the same thing: "The record discloses a factual basis for the Common Council's conclusion that this kind of restriction will have the desired effect (*Young v. American Mini Theatres, Inc.* at 326).

The finding resulted in a five-to-four decision with the dissenting opinions concerned that the ordinances were too vague and that regulations affecting "protected expression must be content-neutral..." (*Young v. American Mini Theatres, Inc.* at 311). The closeness of the decision prompted Strum to write:

> Thus, the Court's decision in *Young* falls far short of a blanket approval of any and all zoning measures which might be enacted against adult uses. The city council or town planning board which would enact such zoning ordinances must be extremely careful in its language and drafting, and be content with achieving limited results if it is not to have its ordinance struck down in any of the several constitutional grounds considered by the Court in *Young* (Strum, 1977, p. 2).

FAYETTEVILLE'S ADULT ENTERTAINMENT ZONING

As mentioned earlier, the Fayetteville City Council had asked the Cumberland County Joint Planning Board to come up with a land use proposal to counter the growing sex business problem. On February 14, 1977, the City Council was presented with the Board's proposal.

Fayetteville had been in a situation much like Boston's. The sex business had accumulated in a concentrated are - Hay Street - long before the ordinance was even considered. The staff of the Planning Board, under the direction of Cliff Strassenburg, felt the best approach was to contain what already existed in that area. At that time some figures showed that approximately 90% of the businesses concentrated in the 1 1/2 block section of Hay Street were adult entertainment businesses. New concentrations were developing on Fort Bragg Road. It was felt that unless the problem was contained, other areas of town would become vulnerable, especially since there was little space left downtown.[3]

The Planning Board approved of the approach but opposition developed. Strassenburg felt there were two key sources of this opposition. The first was from downtown businesses. Even though the Downtown Revitalization Commission supported the proposal, individual businessmen felt that their businesses would only be further destroyed by the spillover of illegal and unattractive activity. Strassenburg indicated it was hoped that the proposal, like Boston's original idea, would result in a broader type of entertainment district that could possibly reduce the emphasis on sex. The second source of opposition Strassenburg identified was the city's police department. The police were devoting many resources to Hay Street without sustained success. Strassenburg stated that the proposal was well on its way to being doomed when the "chief made a public statement to the effect that he didn't want to commit his officers to enforcing a free-for-all zone" (Strassenburg, 1979).

A third source of opposition surfaced at the February council meeting. Local citizens complained that the proposed zone would only condone and endorse the businesses, instead of controlling them. Dr. C.R. Edwards, a prominent minister, said the action would be " 'condoning questionable actions that will lead to further moral decay' " (*The Fayetteville Times*, February 15, 1977, p. 2A). Reverend

Albert Beame said that " 'mere policy of containment...does not work in fighting moral pollution' " (*The Fayetteville Times*, February 15, 1977, p. 2A). David Jones, a former North Carolina Secretary of Corrections and no person to mince words, stated that "this zone is nothing in the world but a magnet to draw the scum of the earth" (*The Fayetteville Times*, February 15, 1977, p. 1A).

With the mayor ill and not present, and the mayor *pro tem* presiding and not voting, the proposal failed by a three-to-two decision. Realizing the action was in trouble, proponents tried to have the decision postponed. The defeat of that motion led to the decisive vote that ended Fayetteville's efforts to enact zoning to contain its adult businesses.

Like Boston and Detroit, Fayetteville chose to use zoning as a technique to control adult businesses. Photo by L.C. Barbour

"... A COUNCIL IS POLITICALLY SUSCEPTIBLE TO CHARGES THAT IT IS CONDONING SEX BUSINESS WHEN IT APPROVES CONCENTRATION..."

Even with the measure defeated, it was obvious that the opposition, especially that of the general public, was to the method, not the idea, of controlling the problem. Certain members of the council continued to explore the problem, as Strassenburg said, "quietly behind the scenes for awhile." With a new council elected, the efforts began to take more shape. A task force headed by Bill Hurley began consultations. The members included the city manager, the planning staff, the city attorney, law enforcement personnel, and eventually finance personnel specializing in licensing. The approach this time was dispersal along with licensing of specified uses. Strassenburg stated that, as a planner, he felt dispersal was not the best approach because it "exposes more areas of the community." He also pointed out that even with the proposed 1,000 foot limitation, what may technically be dispersed "may appear to be clustered along major commercial avenues due to the fact that bars, beerhalls, and clubs not featuring adult entertainment activities, and thus not regulated by the dispersal zoning may tend to fill the 1,000 space between two adult entertainment establishments." At any rate, the rejection of the containment measure, the police chief's support of dispersal, and the legal upholding of Detroit's ordinance, all helped to encourage the dispersal proposal (Strassenburg, 1979).

On February 13, the Fayetteville Revitalization Commission endorsed the proposal, as it had the earlier one. Horace Thompson, the chairman, stated, "this is one of the most important steps taken by government to improve the quality of life in Fayetteville" (*The Fayetteville Observer*, February 14, 1979, p. 1B).

On February 20, the Joint Planning Board gave its approval to the proposal. Old wounds and memories of 1977 surfaced during the meeting. The Board had been criticized by some council members and obviously did not relish such treatment again. Hurley, Thompson and Strassenburg convinced the Board that not only was the plan legal and the result of the task force's work, but a new council was seated that offered a broader range of support. The hesitancy to approve the plan was overcome and for the second time the Board forwarded a proposal to the Fayetteville City Council (*The Fayetteville Observer*, February 14, 1979, p. 1A).

On March 12, 1979, the council considered the proposal. The opposition at this public meeting was quite different from that in 1977. This time the other side complained. Sneed High is a prominent Fayetteville lawyer and had interests in two adult entertainment establishments. "Why should these people (owners, operators, and employees of the adult establishments) be singled out for harassment and embarrassment?" High asked. "The sole purpose of these charges is to put the finger, the spotlight on the people involved in these establishments" (*The Fayetteville Observer*, March 13, 1979, p. 1A). The other speakers, public citizens and officials, gave the proposal strong support. The new council unanimously approved dispersal zoning. Coupled with the zoning measure was a new licensing regulation of a fee and renewal for adult uses. A more controversial measure of requiring identification registration with the police department was withdrawn.

In an interview, Strassenburg stated, "I would like to mention that we put much stock in Detroit's plan being legally tested" (Strassenburg, 1979). One can easily see the proposal's resemblance to that of Detroit; Fayetteville used the same distancing requirements of 1,000

feet between uses and 500 feet from residential zones. It defined its uses in much the same way, relying on the content criteria and the 'specified anatomical areas' and 'sexual activities' phraseology. Even though content is used to define the regulated activity, it is plain the intent is to meet the "deleterious effects" and "objectionable operational characteristics ...when concentrated." Fayetteville's special entertainment uses include:

1) adult book stores,

2) adult motion picture theaters,

3) clubs offering nude or semi-nude entertainment,

4) eating establishments offering nude or semi-nude entertainment,

5) physical cultural establishments, massage parlors, and

6) adult motels and hotels (Zoning Ordinance of the City of Fayetteville Sec. 32-32.1).

This list seems to reflect the diversification of the industry since Detroit encountered it in 1962.

CONCLUSIONS

In conclusion, it is too early to tell whether Fayetteville's approach will be successful. What may be more important is what other cities can learn from Fayetteville's experience. The following observations are offered:

First, Fayetteville encountered several political constraints when it made its initial strategic decision to choose concentration or dispersal. It is obvious that a council is politically susceptible to charges that it is condoning sex businesses when it approves concentration, no matter what recommendations it receives from its advisory bodies. It is equally obvious that elections can change a council's outlook. In addition, concentration threatens those people on the zone's fringes. Dispersal does not target any area, and the Hay Street businessmen did not protest the disperal approach.

Second, in preparing the ordinance itself, a city should remember that the *Young* case did not carve Detroit's ordinance in stone. Even in its approval, the Court pointed out some definitional weaknesses and stressed that Detroit had put some effort into establishing deleterious effects. To be safe, perhaps cities should *combine* the Boston and Detroit definitional models of age and content standards. To be equally safe, some type of study should be done to verify the actual effects of the sex business. It is wise to remember that Detroit sought to curb the effects of the business, not to eliminate the business itself. Strum stated the warning well:

> A municipality whose real motivation in enacting adult-use zoning legislation has been to suppress or significantly diminish legal adult uses, and whose legislation consequently operates to achieve this effect, will likely find its legislation overturned as unconstitutional in the courts. The Supreme Court in *Young* specifically and repeatedly premised its decision... upon its findings that those ordinances diminished neither the volume nor the accessibility of adult entertainment... (Strum, 1977, p. 39).

Third, the governmental administration is much better off establishing a united front in its efforts. As Fayetteville's experience indicates, when as integral an actor as a police chief is opposed to the chosen proposal, passage may become difficult. The task force committee seemed to facilitate passage the second time around. Typical of the professionalism involved was Strassenburg's initial opposition but active support once the group's decision was made.

Fourth, and perhaps most important, is the recognition that zoning is only a tool in the total effort to control the effects of adult entertainment. Strassenburg stressed that only a comprehensive approach will work. This would include zoning, licensing, active law enforcement, sign regulations, and nuisance provisions (Strassenburg, 1979).

Strum concludes:

> In a society increasingly tolerant of private sexual activity, but still concerned over commercialized sex - especially its high visibility and feared influence on young people and on neighborhoods - zoning of adult uses offers a workable solution. Adult-use zoning is a solution responsive to the problem of commercial sex and, when carefully planned and executed without the unlawful motive of suppression, one that is compatible with the freedoms guaranteed under the Constitution (Strum, 1977, p. 45).

Administrators and planners should temper this endorsement of adult entertainment zoning by remembering that it is a workable solution, formed by the community, its own circumstances, and its own influences.

NOTES

[1]The Prince Charles Hotel ceased operations in October 1979 when it was condemned. The city of Fayetteville entered into a purchase agreement on the building in 1977 but has yet to receive the title to it.

[2]Interview with William Heintzleman, former supervisor in Special Operations Division of Fayetteville Police Department, November 30, 1979.

[3]Interview with Cliff Strassenburg, Planning Director, Cumberland County Joint Planning Board, November 30, 1979.

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Paul Luebke

Neighborhood Groups vs. Business Developers in Durham:

Expressway Politics in the Scarce Energy Age

The East-West Expressway in Durham, North Carolina, assumed by its businessmen supporters to be completed routinely during the early 1980s, has been stalled primarily by a coalition of white and black neighborhood groups aligned against it. The Coalition for Expressway Alternatives delayed the project in February 1979 by persuading the Durham City Council to reverse its earlier votes and oppose the completion of the highway. The future of the highway at this writing is still in doubt for a variety of reasons: the national energy issue, a revised federal domestic policy which opposes suburban development at the expense of the central city, rising road construction costs and civil rights issues.

At issue is a 2.1 mile westward expressway extension which would complete a crosstown highway first begun in 1966.[1] The case for completing the expressway is local traffic congestion in West Durham, and the embarassment of not finishing a project begun fifteen years ago. Finishing the road would also provide a convenient connection for through-city traffic on Interstate highways 85 and 40. However, completing the hgihway would require relocating 200 families in a low-income black neighborhood known as the Crest Street community, and might also damage the city's economy more than help it.

This paper examines the values of Durham's businessmen (proponents of the extension) and the neighborhood alliance (opponents of the extension), highlighting their contrasting positions on numerous issues facing most American cities in the 1980s. The Durham expressway controversy is significant for at least three reasons. First, the timeframe of the conflict demonstrates the reaction of both sides to our energy problem. Second, the white-black coalition against the white business community introduces a political cleavage based on economic self-interest which could either replace or augment the perennial Southern racial cleavage. Third, North Carolina state officials have unequivocally supported the business developers' position. Unlike the situation of neighborhood groups during the Boston expressway conflict a decade ago,[2] Durham's neighborhood coalition found that its Democratic Governor and his Secretary of Transportation were unimpressed by arguments against the expressway, viewing the Coalition as "liberal" and therefore insignificant in a state dominated by conservatives. The battle between businessmen and neighborhood groups arose because of differing views on two questions: how the city of Durham can prosper in the next two decades; and how important the automobile is for the city's future. Detailed answers to these questions appear below and outline the value-systems of expressway proponents and opponents. The response by these two groups to the energy issue is also examined.

PROGRESS VS. NEIGHBORHOOD PRESERVATION

For Durham's business community, building the expressway is simply the latest in a series of progressive moves over the last half century which succeeded in "getting North Carolina out of the mud." Neither the state nor a city like Durham can prosper without good roads. Suburban development had begun by 1970 in the area northwest of the city limits and it was logical for the city of Durham to support expressway construction to enable suburbanites to commute to their jobs in Durham or the Research Triangle Park (beyond downtown Durham, and outside the city limits). Indeed, businessmen argue that completing the expressway will make "greater Durham" more attractive, and increase the likelihood that Research Triangle professionals will move to Durham's suburbs rather than to Raleigh or Chapel Hill. Bankers and real estate developers who could benefit directly from suburbanization strongly support the expressway,

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The Crest Street neighborhood is a cohesive and well-organized community of lower-income blacks. Photo by Terry Delaney

and a 1979 Chamber of Commerce poll found that an overwhelming number of its members also favor the highway. For most Chamber members, extending the expressway is synonymous with "progress" and "growth." As businessmen have often said to neighborhood activists at city- or state-scheduled public meetings, "If you don't want the expressway, then you must not want Durham to grow."

Expressway opponents argue that preserving and improving existing neighborhoods within the city is far more important than suburbanization. Neighborhood advocates point particularly to the damage that would be inflicted by what the businessmen call "progress": relocating 200 families against their will. They argue that "progress" should not be measured by the amount of pavement laid.

Most blacks in Durham oppose the highway because a black neighborhood is expected to sacrifice "for the good of the whole city." They remember how blacks suffered when earlier legs of the expressway were built; in particular, promises by white officials to redevelop black businesses and relocate housing have not been kept.

To upper-middle class whites who live within 1000 yards of the expressway right-of-way, "neighborhood preservation" means fighting for a future Durham which will not be crisscrossed by highways carrying commuters or intercity truck and car traffic. While some of these whites sympathize with the blacks on Crest Street, their primary motive is self-interest. In both of the upper-middle class neighborhoods along the right-of-way, activists argue that a completed expressway will accelerate the flow of the middle class from their established inner-city neighborhoods into the suburbs. They cite numerous Northeastern cities as evidence.

The value of "neighborhood preservation," variously defined, links upper-middle class whites and low-income blacks to the Coalition for Expressway Alternatives (CEA). It is doubtful, however, that CEA could have persuaded the Durham City Council to oppose the road had the Coalition not included a group of mostly college-educated neighborhood activists in their 20s and 30s known as the People's Alliance (PA).[3]

"WHILE SOME OF THESE WHITES SYMPATHIZE WITH THE BLACKS ON CREST STREET, THEIR PRIMARY MOTIVE IS SELF-INTEREST."

PA members are sympathetic both to the anti-racism arguments of Crest Street residents and the environmentalist positions of the upper-middle class. Indeed, it is the PA which released in 1978 a sixty-page position paper to the Durham City Council and the news media, opposing the expressway for racial *and* environmental reasons. It is the PA which convinced reluctant upper-middle class whites to coalesce with blacks if they hoped to stop the highway. Finally, the PA has challenged the economic arguments of Durham's business developers, asserting that there is no evidence that the *city* of Durham would benefit from suburban development beyond the city limits. The PA claims that it is as committed to "growth" as the Chamber of Commerce, but that completing the expressway would encourage residential, commercial and industrial development in the northwestern suburbs, and would fail to increase the city of Durham's dwindling tax base.

THE AMERICAN LOVE AFFAIR

For the Durham business community, transportation is synonymous with roads. Businessmen nodded approvingly at a 1978 public meeting when a city transportation engineer testified that driving in one's automobile is "human nature." The business view is that people only ride the bus when they are too poor to own a car, and that those who own cars have a right to expect their elected officials to provide them with sufficient roads. In short, the businessmen place high value on the use of the private automobile and government financing of more roads. The "love affair" between Americans and their cars is unchanging.

The neighborhood groups place far less value on the private car as a means of local transportation. Instead, they value government programs which minimize road expenditures and focus on mass transit or paratransit (car-pooling, van-pooling, or park-and-ride systems). CEA proposals do not oppose the widening of existing local streets to four lanes in West Durham, but recommend widening only when no residential relocation would result. Expressway opponents cite Federal Highway Administration research on "generated traffic" (FHA, 1973) and argue that

an emphasis on road-building encourages a "bad habit" among auto users. If the government spent money on improving local bus service, auto users might switch to the bus and air and noise pollution in the city would decrease. Neighborhood activists believe that the "hidden subsidy" to the auto user should be ended.

CRISIS VS. NORMALCY

Durham's business developers and neighborhood groups differ, both on desired economic development patterns and transportation modes. Each side's value system leads to a model or, in Thomas Kuhn's term, a "paradigm" which should explain future events (Kuhn, 1962). The deteriorating American energy situation has fundamentally different effects on the two groups' paradigms. For the neighborhood coalition, the energy shortage is a *normal* event which fits perfectly into their model. After all, CEA has recommended that bus service and paratransit be increased. Although gasoline was just .60/gallon in June 1978 when the PA wrote its position paper, it warned that the long-range need for highways in this country and in Durham has been reduced and that "the day of unlimited federal spending for highways is over" (PA, 1980). After spring 1979, when gasoline prices rose quickly, the PA issued two separate reports criticizing the state Department of Transportation for its failure to revise downward traffic projections for West Durham (PA, 1979 and 1980). The PA recognized that reduced traffic projections for the years 1990 and 2000 would also reduce the cost-effectiveness of the expressway proposal. Given high rates of inflation, the federal Department of Transportation might conclude that the expressway proposal should be abandoned in favor of other alternatives. In general, neighborhood activists in the Coalition, whether upper-middle class environmentalist or Crest Street resident, recognize that the national energy issue strengthened their arguments against the expressway.

For the business developers' model, the energy problem and related appeals to conserve energy produced a crisis, because speeding along the expressway toward job or home is incompatible with energy conservation. Businessmen faced a breakdown in their model if they tried to integrate the "energy conservation" message into it. By ignoring the "energy conservation" message and the national energy shortage, businessmen could continue to focus on *their* arguments for the expressway. Interestingly, they found two sets of allies. First, Governor Hunt sought political support in Durham County for his re-election. In January 1980, at a campaign fundraising breakfast in Durham attended mostly by businessmen, the Governor announced that completion of the East-West Expressway would be a "top priority" of his second administration (*Durham Morning Herald*, 1980). The state Secretary of Transportation, a gubernatorial appointee, concurred in that decision, and after Hunt's re-election, NCDOT repeated that money would be found.

Besides political support, Durham businessmen have the help of transportation planners at both the city and state level, whose values are similar to theirs and for whom the energy shortage also generates a potential "paradigmal crisis." In a September 1978 report by the Durham City Traffic Engineering Division to the City Council on alternatives to the expressway proposal, the authors concluded their introduction as follows:

> Although most people are concerned with the energy shortage and the adverse impacts of automobile traffic on their environment, they value their own comfort and convenience more. This study has attempted to recognize existing human values and has made no attempt to recommend changes (Durham City Traffic Engineering Division,1978).

Graphics by Sue Sneddon

The city staff thus presented its and the businessmen's values as "existing human values" and ignored those of the affected neighborhood groups.

On three occasions state transportation planners have provided Durham businessmen with arguments for the necessity of the expressway extension which ignored rising energy costs. The first report, released in September 1978, was sent to the Greater Durham Chamber of Commerce and the news media in response to a Chamber of Commerce request for updated information on the expressway (NCDOT, 1978a). The Draft Environ-

mental Impact Statement, required by federal law, was released to the public in October 1978 (NCDOT, 1978b). The third report, released in January 1980, was a study of expressway alternatives requested by the Durham City Council when it voted against the expressway in February 1979. All three reports rejected the alternatives as inadequate to handle projected traffic, and ignored arguments about the potentially negative impact of an expressway on the city's economy. In October 1978 and January 1980, the public was offered an *identical* conclusion:

> If the freeway is not built, the motorists would not enjoy the safety benefits that are anticipated to accompany the construction of the freeway. The City of Durham would also not benefit from the economic growth and development that generally accompanies freeway construction (NCDOT, 1980).

Following release of the January 1980 report, a high-ranking state transportation planner indicated that traffic projections for West Durham in all three reports were based on assumptions made in 1974.[4] This strongly suggests that all traffic projections in the state reports are invalid because they ignore two critical changes in public behavior since 1974. First, vehicle trip predictions for Durham in the year 2000 assumed *real* income annual growth rates of 3% and population annual growth rates of 1.8% (NCDOT, 1974). Between 1974 and 1979, Durham's real income increased at a 1.6% annual rate and its population increased at a 1.2% annual rate.[5] Despite public availability of data on reduced growth rates, no state transportation planner entered the lower figures into the trip prediction model.[6] A second change in transportation data ignored by state planners was the five-to-ten percent decline in gasoline tax revenues following the 1979 major price hikes, which suggested that the public was driving less and/or driving smaller cars. Traffic projections for West Durham in the January 1980 report were the same as those predicted in the October 1978 Draft Environmental Impact Statement, despite a near-doubling of fuel prices. As late as January 1980, state transportation planners assumed that less population growth, a declining standard of living, and increased gasoline costs would not change the transportation habits of Durham citizens and thus, that the need for the expressway continued. For Durham Businessmen who believe that the city's prosperity depends on completion of the expressway, such assumptions are welcome.

WINNERS AND LOSERS IN EXPRESSWAY POLITICS

Fundamental value conflicts exist between proponents and opponents of Durham's East-West Expressway extension. It is clear that the energy problem facing the United States constitutes a "paradigmal crisis" for the pro-suburb, pro-automobile value system of the city's business developers. The business community has managed to avoid the "crisis" by building alliances with politicians and transportation engineers, at the state level especially, who continue to promote the expressway even though federal politicians and transportation planners are turning against highways as solutions to urban traffic congestion.[7] The success of Durham businessmen in state politics has forced the white-black neighborhood coalition to seek allies at the federal level. The CEA has prepared arguments for distribution to federal Department of Transportation officials which highlight the cost-*ineffectiveness* of the expressway proposal, the long-term benefits of improved mass transit and paratransit in Durham, and the likely negative economic impact on the central city if the highway is completed. In addition, the Crest Street community filed a federal civil rights complaint in September 1978, arguing that the proposed expressway would harm blacks disproportionately and should thus be ruled illegal. In February 1980, a preliminary ruling by the Civil Rights Office of the federal Department of Transportation favored the community.

The East-West Expressway would displace 200 Crest Street area families from their neighborhood. Photo by Terry Delaney

For Durham's businessmen to prevail, they must first outstep the evolving alliance of neighborhood activists and federal transportation officials. It would be naive to suggest that technically-rational transportation decisions cannot be overruled for political reasons. However, some of the neighborhood activists have promised to fight, if necessary, beyond the USDOT through the federal courts. The combination of an effective neighborhood coalition, civil rights legislation, rising construction costs, and the reduction in highway funding may well lead to a federal decision to abandon the expressway project, regardless of Durham businessmen's efforts.

Meanwhile, Back in Crest Street

While state and local officials and various interest groups were embroiled in the intense debate over the extension of the East-West Expressway, resources to revitalize the Crest Street neighborhood began to dry up. In summer 1980, the $955,000 of Durham's Community Development Block Grant (CDBG) funds budgeted for Crest Street was frozen by HUD officials in Greensboro. To them, it made little sense to spend money repairing houses that might face a bulldozer in a few months. "Better spend the money elsewhere" was the message HUD officials passed on to the Community Development Office in Durham.

And that's what the city did. The Community Development Office put aside $100,000 for interim assistance for emergency housing rehabilitation and a temporary park and "reprogrammed" the balance, $855,000. Crest Street would not be seeing any more CDBG money until the dust had settled from the expressway fight.

Not to be put off by the lack of public funds, the Crest Street Community refused to loose sight of its original intention of revitalizing the neighborhood. Through a series of events triggered by the filing of an administrative complaint by North Central Legal Assistance Program in the community's behalf, the Crest Street struggle came to the attention of Chester Hartman, then a visiting professor at the UNC Department of City and Regional Planning in Chapel Hill twelve miles away. What developed in fall 1980 was a fieldwork class consisting of sixteen planning students whose task was to work with the Crest Street community in its revitalization efforts. The class produced two major projects: a survey of the community and a preliminary draft of a community revitalization plan.

The survey was undertaken at the request of the East-West Freeway Study Steering Committee, an offspring of the expressway debate. The committee was jointly chaired by Willie Patterson, an active, seasoned member of the Crest Street Community Council, and Thomas Bradshaw, Jr., North Carolina Secretary of Transportation. The committee needed information on the Crest Street Community for Expressway planning. The community was concerned that a survey conducted by the Department of Transportation (DOT) personnel might be biased against their interests, and that the results might be used to push the unwanted uprooting of community members. The two factions sought a more impartial party to design and conduct the survey; they settled on the class of planning students at UNC.

During September and October the class and committee went through a period of intensive negotiation to develop a survey design which met the approval of the committee and also generated data for preparing a community plan. Through the cooperation and assistance of the community, over 90% of the 225 households in Crest Street were surveyed, yielding an impressive and rare community-scale data base for neighborhood planning.

The second phase of the class was to develop the plan. Taking their cues from Crest Street Community Council members, the class adopted community control as the guiding principle of the plan. Research confirmed what Crest Street residents already knew: that much of the neighborhood's resources in land, housing, public services and employment were owned or controlled by outside interests which were not necessarily sympathetic to revitalization efforts.

The plan, which is under preparation at this writing, suggests to the community options for gaining control over housing, community facilities, and economic development activities through organizing ventures such as a housing cooperative, a locally-owned housing rehabilitation service, a community center, parks, neighborhood gardens, adult care homes, a food buying club, and a community finance organization. The plan has four parts: housing rehabilitation, new housing, community facilities and community economic development.

In spring 1981 another group of students led by Carol Stack (on loan from Duke's Institute of Policy Sciences) will help the Crest Street Community Council develop strategies for getting selected projects underway.

And so the Crest Street community, playing hopscotch around a debate which has polarized a city and dried up federal resources, continues to move ahead.

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Chronology of the Durham East-West Expressway Controversy

1960. Durham City Council and North Carolina State Highway Department agree on the need for a crosstown East-West Expressway in Durham.

1966. First leg of expressway is begun through a black business and residential community.

1974. Expressway, uprooting some white but mostly black neighborhoods, is completed from the Research Triangle Park east of Durham to within one-half mile of the low-income, black Crest Street Community (CSC).

1977. CSC rejects relocation offers from city and state officials; receives legal assistance from Durham Legal Aid program to save the neighborhood by opposing the expressway.

February 1978. People's Alliance (PA) aligns with CSC and seeks other allies in a citywide white-black coalition whose purpose is to persuade City Council to reverse its earlier positions and oppose the expressway.

June 1978. PA position paper opposes expressway because of Crest Street destruction, but also because of increased intercity traffic and noise and air pollution, negative effects on the city's tax base, the need to conserve energy, overstated traffic projections, and availability of more cost-efficient alternatives.

September 1978. City traffic engineering staff study of expressway alternatives emphasizes road widenings, predicts need for eight- and twelve- lane roads, doubts viability of bus and paratransit alternatives, and assumes energy shortage will not change transportation behavior of Durham public.

October 1978. Coalition for Expressway Alternatives (CEA), with twenty constituent groups, is formed. Pro-expressway support is mobilized by the Greater Durham Chamber of Commerce.

October - December 1978. City Council and state Department of Transportation (DOT) hold separate public hearings to elicit public response to the expressway proposal.

February 1979. City Council rescinds earlier support of expressway; requests alternatives study by state DOT.

November 1979. A pro-expressway City Council is elected by narrow margins in a hard-fought campaign; votes for expressway as its first official act.

January 1980. State DOT reports to City Council that no alternatives to the expressway are acceptable, the CSC must be relocated, and the expressway must be built. Final version of Environmental Impact Statement to federal DOT is expected to include these recommendations.

February 1980. PA criticizes the January 1980 state DOT report, arguing before the City Council that the state report made fundamental technical errors in projecting Durham's traffic needs for the year 2000.

February 1980. Civil rights office of federal DOT tells state DOT of its preliminary ruling that expressway alignment through CSC places disproportionate burden upon blacks and is thus a violation of federal civil rights legislation.

March 1980. State DOT promises city business community that an alternative expressway alignment avoiding Crest Street is available, so that the federal DOT civil rights ruling will not jeopardize the expressway's completion. CEA members dispute state DOT, arguing that the expressway proposal may be dead, because no such alternate alignment can be easily drawn.

May 1980. State DOT states that a final Environmental Impact Statement including a new expressway alignment will be released in December 1980. This document will be subject to citizen reaction at a public hearing in 1981.

May 1980. NCDOT proposes an "East-West Freeway Steering Committee" to respond to USDOT civil rights ruling. Members are to include CSC, federal, state and local transportation officials, and representatives of city and county government. CSC accepts proposal on condition that two additional anti-expressway organizations from the CEA (the liberal Durham Voters Alliance (DVA) and the PA) are included.

June 1980. Expanded "East-West Freeway Steering Committee," with balanced pro- and anti-expressway representation, holds first meeting. Freeway Steering Committee (FSC) pledges to seek "a solution to the transportation needs of the Durham community with appropriate and adequate attention to the needs of the Crest Street neighborhood."

September 1980. At request of FSC, UNC-CH City and Regional Planning students survey Crest Street residents about neighborhood needs.

December 1980. PA and DVA jointly release a position paper on West Durham traffic congestion, recommending a non-expressway solution which would save the Crest Street neighborhood, cost only one-quarter of the 1980 expressway price, and could be implemented in far less time.

December 1980. Durham City Council rezones land within Crest Street neighborhood to permit motel construction. Criticizing this act as "bad faith" undermining the FSC's work, CSC, PA and DVA boycott scheduled FSC meeting.

February 1981. NCDOT renews pro-expressway commitment to Durham business community, and seeks to revive the boycotted FSC.

February 1981. Funding problem for state highway construction grows, as Reagan Administration proposes a 7% cutback in federal highway spending, and monthly North Carolina gasoline tax revenues (the basis for state funding) are 9% lower than in January 1980.

NOTES

[1]A chronology of the conflict is provided in Appendix I. The *Durham Morning Herald* is the basic source for this history. See *Durham Morning Herald*, issues of March 7 and September 22, 1966; and March 3, 6; April 2, 4; August 23; and December 6, 7, 1967. The history is summarized in *A Case Against the East-West Expressway: A People's Alliance Position Paper* (People's Alliance, Box 3053, Durham, N.C.: June 1978), pp. 2-6.

[2]Massachusetts moderate Republican Governor Francis Sargent and the state legislature listened carefully to both pro- and anti-expressway arguments. In February 1970 the neighborhood coalition won the support of the Governor and stopped the expressway plan. See Alan Lupo et. al., *Rites of Way: The Politics of Transportation in Boston and the U.S. City* (Boston: Little Brown, 1971), esp. chap. 11.

[3]For a detailed analysis of the growth of the anti-expressway coalition, see the author's "Activists and Asphalt: Successful Resource Mobilization in an Anti-Expressway Movement," delivered at the 1980 meetings of the American Sociological Association, New York City.

[4]Interview with William Caddell, N.C. Department of Transportation, Raleigh, January 1980.

[5]U.S. Bureau of Labor Statistics, *Employment and Earnings*, May 1974 and May 1979. U.S. Bureau of the Census, *Current Population Reports*, no. 772, January 1979. See also Charles Hirschman, "Comments on 'Durham Growth Trends' Assumptions of North Carolina Department of Transportation" (Durham: Department of Sociology, Duke University, April 1980).

[6]For an example of trip modeling similar to the N.C. Department of Transportation's model, see Walter Y. Oi and Paul Shuldiner, *An Analysis of Urban Travel Demands* (Evanston: Northwestern University Press, 1962).

[7]The Reagan administration transportation policy transition team recommended that controversial urban expressway projects be dropped, given the likelihood of continued citizen opposition and extremely high per-mile construction costs. New York City's Westway proposal was specifically cited, but the East-West Expressway extension also meets the transition team's criteria *(Washington Post*, December 27, 1980). For examples of national transportation planning, see articles in the last four years of the leading transportation journal, *Traffic Quarterly*. Especially relevant for the Durham case is Clinton V. Oster, Jr., "Household Tripmaking to Multiple Destinations: The Overlooked Urban Travel Pattern," *Traffic Quarterly*, Vol. 32 (October 1978), pp. 511-29.

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Book Review

"Women and the City," special issue of the *International Journal of Urban and Regional Research,* edited by Michael Harloe, Volume 2, Number 3, 1978, Edward Arnold (Publisher) Ltd., Halford Square, London WCIB 3 DQ.

"Women and the American City," special issue of *Signs: Journal of Women in Culture and City,* edited by Catherine R. Stimpson, Volume 5, Number 3, Spring 1980, The University of Chicago Press, 5801 Ellis Avenue, Chicago, Illinois 60637.

If the works in these two volumes represent (as I suspect) the best of work to date on women and urban issues, then they should best be labelled pioneering, rather than radical. While both the British *International Journal of Urban and Regional Research's* "Women and the City" and *Signs'* "Women and the American City" tackle the analysis of problems women encounter in urban environments, neither forms a coherent review of the whole nor offers a well worked-out blueprint for solving the problems. Consequently, taken separately or together, neither of these volumes will realize "the potential of requiring fundamental changes in some of the most basic elements of the modern city." They do, however, demand a change in the way we *think* about women and cities.

Perhaps the shortcomings of these two volumes are to be expected. They are, after all, exploratory efforts. Generally, at least five to ten years of hard work in a new field are required before substantial, complete analysis can be expected. Both of these volumes have been published within the last three years and offer very recent work by comparatively young scholars.

The first to come out, the *IJURR's* "Women and the City", was produced by the Women's Caucus of the British Sociological Association, and focuses on three countries -- Great Britain, France and the United States. The academic backgrounds of the editorial collective producing the volume explain, to some extent, why its contents fall short of any complete analysis. Most are sociologists, and the focus of the contributors is, for the most part, on feminist issues arising out of sociological concerns which *happen* to occur in cities.

By contrast, the contributors to *Signs'* "Women and the American City", published this past spring (1980), represent a diverse group of professions including, among others, architecture, planning, criminal justice, sociology, psychology and health. As a result, this volume covers a broader range of topics relating to women and urbanism. However, the piecemeal approach to editing and combining the contributions in the *Signs* volume makes it quite difficult for the reader to determine the underlying themes of the issue as well as the major ills confronting women in urban environments. The introduction to the book does little, if anything, to transcend the editing problems. Less than one and a half pages in length, the introduction purports to identify three hypotheses underlying the contributions. They are: "the American city has both enhanced and constricted women's lives; the experience of men and women is quite significantly different; and, finally, such divergences and effects are original and provocative." To claim that these are hypotheses is pretentious, since in such general form they are neither refutable nor informative. Nor does this list yield a coherent vision of the relationship of women to urban form.

Even though the *IJURR's* "Women and the City" covers a smaller range of subjects, its approach is piecemeal as well. On the other hand, the introduction to the volume by Eva Garmarnikov does a far better job of transcending editorial problems and in identifying a framework of analysis in which to place the contributions. The framework which is identified focuses on women's oppression within the urban system. But because the framework is skeletal and incomplete, only certain aspects of oppression are examined by the articles. These include: "the ideology of the home, state policy in relation to the family, transport and spatial inequality, and sexual segregation and (the) division of labour" (p. 397). As sociologists, the contributors to the *IJURR* volume are highly critical of much of urban sociology which they argue has not adequately dealt with women's issues. E. M. Etorre writes that "the domain of 'the urban' has been reserved for men and

by men" (p. 500). Furthermore, throughout the issue the contributors take a consistent stand on criticizing Manuel Castell's recent contributions to urban sociology because he does not incorporate women into his view of urban practice. Hillary Rose points out that the new urban sociology is theoretically open to the collective actions of such groups as students, squatters and others within the community but omits the collective actions of women (p. 322).

The contents of "Women and the City" are provocative but flawed. The issue is largely theoretical, and provides little direction for those who would like to incorporate its views into their urban practice. To some extent, the volume is becoming outdated (i.e., its discussion of women's lack of access to the mortgage system seems to be almost a moot point, at least in the United States). By way of contrast, however, Miriam David's examination of the contradictory nature of state intervention in regards to women's labor force participation rates is increasingly relevant, as those rates continue to rise. However, what this argument has to do with cities, per se, is hard to discern.

Though published less than three years ago, *IJURR's* "Women and the City" has already become a seminal work. (Its influence on the *Signs* volume is readily apparent.) The *IJURR* collection is not particularly easy reading, but it pioneers the concepts and theories which must continue to be articulated -- louder and more clearly -- in order to allow women greater equality of participation in our urbanized society.

In the *Signs* issue, we find addressed almost all of the issues that the *IJURR* volume covers, as well as a number of other subjects such as health, the movie industry, older women, and the design and use of recreational space. The *Signs* contributors come closer than did those in the *IJURR* issue to answering some of the questions which arise from an examination of urban life through a feminist lens. In particular, the authors, manifesting their preoccupation with American cities, strongly emphasize the domestic role of women, day care issues, and call for the development of collectivized responsibilities between and within households. There is also a basic consensus that, while neither are adequate, the city offers more to women than does the suburb. For it is in the city that women can find lower-cost housing, greater opportunities for socializing, public transportation, better access to jobs, and easier management of daily time spent on household work, child care and paid employment.

The diverse contributions to the *Signs* journal address many important issues of women and urbanism. However, the breadth is problematic in that 1) the coverage is spotty, and 2) some of the articles seem out of place. The second problem arises because, although all the articles focus on women, some relate minimally -- if at all -- to urban issues. In this latter category belong the two articles which focus singularly on the subjects of health and of the rise of the movies (see Ewen, and Hurst and Zambrana, respectively). In contrast, another article which focuses singularly on older women clearly relates this group's problems to issues of the city (see Markusen and Hess).

Although there are recurring themes in the *Signs* contributions, there is little dialogue among them. This becomes obvious when one reads Hayden's proposal to eliminate the isolation and inefficient time utilization women experience living in America's single family housing stock. Hayden focuses on the redesigning of existing *suburban* stock while most of the articles in the volume emphasize that the city is a more supportive and accessible living environment for women. Further, the greatest need for new urban design is exhibited by women found more frequently in the city: the low-income, elderly, and single parents. Apparently, the question of where urban redesign energies should go, to remaking the city or revitalizing the suburb, has not been considered.

The articles on urban policy by Markusen and Freeman illustrate that this is an area of concern for women; they argue that urban policy -- or lack of urban policy -- has profoundly shaped women's opportunities. Explicit in these articles is the message that many urban problems, especially as they relate to women, are caused or exacerbated by sexism. The failure to take this into account has often meant that the solutions of urban policy makers have, in fact, compounded the problems of women *and* cities. Also included in the volume is an excellent review essay by Gerde Wekerle on the scholarship to date on women in the urban environment.

The two volumes together offer a glimpse of the evolution of work on women's life in urban space, sometimes in a single woman's research. Two articles by Dolores Hayden provide the most direct example of this. In "Women and the City", Hayden examines the cooperative house-keeping movement led by Melusina Fay Pierce in the United States during the early 1900s. Then, in "Women and the American City", she examines the development during this century resulting in our present housing stock; reviews the experimental approaches of other countries to meet the housing needs of employed women; and finally, attempts to design a housing program and cooperative to meet the needs of today's

families with employed women and/or single heads of households. (Thus, from a study of Utopias, she has moved on to exercise a Utopian mind herself.)

"Women and the American City" has also followed some of the recommendations made by "Women and the City" for future work, such as addressing the issues of sexual division in the urban labor market and women's access to housing. However, there are important questions which neither volume has attempted to answer. For example: In what ways does the issue of urban energy affect women? Furthermore, what are the consequences to women of the environmental hazards resulting from increased urbanization and industrialization? This latter question addresses an issue which is surfacing with increasing frequency, and which is particularly important in light of such recent controversies as Love Canal.

Another question unanswered: What have past and present economic development and urban renewal strategies done for women? With the United States and the world facing major economic problems, and a movement gaining momentum which calls for a "reindustrialization" of America and revitalization of cities, the timeliness of such an analysis is all too clear. Furthermore, without such an analysis, women will not likely have greater participation in economic development than they did in the past.

Besides these questions, there is a major task which must be tackled by those claiming to examine the issues of women and urbanism. We have yet to truly gain an understanding of how spatial form not only *affects* women but reflects and is created by sexism. Looking only at the ways spatial form affects women does not answer the question: Can cities through change in spatial form become non-sexist without society first changing? Ann Markusen's article in "Women and the American City" does try to examine city spatial structure, but it is by no means the definitive work.

The contents of the two special volumes on women and urban issues reviewed here will stimulate, as well as disappoint, planners. One would hope that the women urban practitioners writing in the two volumes could offer blueprints for restructuring the city and urban environment to be more supportive for women. However, with the exception of Hayden's article in "Women and the American City", these works primarily focus on the consequences of sexism in the city. But perhaps we should bear in mind the conditions under which women scholars have had to work. In general, analysis of women's issues have not been given fair shrift in academic circles -- they are not considered scholarly material. Since the academy treats women's issues as secondary, women have had to first gain acceptance for themselves by working on more traditional issues and analyses. Jacqueline Leavitt's research notes in *Signs* reveal the reasons women have had so little impact on the development of the planning profession. She points out that planning was almost exclusively a male profession until the 1970s. And when the percentages of practicing women planners finally began to increase, their graduate training provided little-to-no preparation for analyzing planning issues from a feminist perspective -- women's planning issues were simply not taught.

Despite their flaws, "Women and the City" and "Women and the American City" can be starting points for incorporating women's concerns into analyses of planning issues for students and practitioners of planning. The discrimination against treating women's issues in planning is tragic because these two volumes do demonstrate that the issues are extensive and momentous. Moreover, because women are comprising an increasingly greater percentage of the urban population, as well as a growing proportion of such planning client groups as the elderly, the low-income and unemployed, these two volumes are relevant reading for all planners and not just those with a feminist outlook.

The research found in these two volumes on the links between women and the city raises serious doubts about some of the basic approaches to planning the city, and the suburb, in the areas of land use, transportation, housing, unemployment, and health. We need more and better research of women and urban issues. But most importantly, the fruits of these efforts and women's concerns must be incorporated into all planning activities. For, without this incorporation, the planning problems of one of its largest -- if not the largest -- client groups.

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